The Libre-Halaal ByStar Digital Ecosystem

An Inversion to the Proprietary Internet Services Model

Neda Communication Inc.'s Open Business Plan

Executive Summary

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Contents

List of Figures

1 About Neda's ByStar Open Business Plan

This business plan is about:

> **The Libre-Halaal ByStar Digital Ecosystem**
> **A Unified and Non-Proprietary Model For Autonomous Internet Services**
> **A Moral Alternative To The Proprietary American Digital Ecosystem**

With ByStar, we are creating a complete parallel digital ecosystem to compete with and stand against the existing Proprietary American Digital Ecosystem. Above all, ByStar is about preservation of the individual's autonomy and privacy.

Neda's ByStar business model is web published in the form of an Open Business Plan. The plan is freely available on our website to be read by anyone. The primary access page for the ByStar open business plan is: http://www.neda.com/strategicVision/businessPlan

ByStar open business plan is available in 3 forms:

- The Condensed Summary (about 12 pages), PDF, HTML.

- The Executive Summary (about 15 additional pages), PDF, HTML.

- The Full Plan (about 85 pages), PDF, HTML, PLPC-180014.

1.1 Ambitious, Complex and Unusual

Our business plan is unusual in a number of respects.

1. **What we offer is unique and unprecedent**. Our primary offerings are: Tangible Autonomy and Tangible Privacy. On large scale there is a demand for this. Facebook, Google, Microsoft and Apple are in the business of exploitation of autonomy and privacy. The business model required for offering true tangible autonomy and tangible privacy is very different from traditional current practices.

2. **Our Scope and Scale Is Enormous**. The scope of ByStar is everything. The "*" in By* comes from the glob expansion symbol. The integrated facilities of ByStar are intended to be used by a very large segment of population on this planet. Attempting something of this monumental scope and scale (a new model for the entire global Internet services industry!) is beyond unorthodox; it's scarcely even believable.

3. **Our Execution Plan Is Broader Than Business And Engineering**. The nature of our offering requires considerations that go beyond engineering, business, marketing and sales. Philosophy, morality, society, social relations and humanity are also on the table.

4. **Our Offerings Demand Internal Transparency Of All Software And Services**. It is not possible to offer real and tangible autonomy and privacy without committing to complete internal transparency of software and services. All of ByStar is internally transparent and Libre-Halaal. The proprietary model leads to closed/dark software and dark services (internally opaque) which are inherently anti-autonomy and anti-privacy. By definition, proprietary closed/dark software can not be trusted. So, we take this as a marketing opportunity to attack the proprietary digital ecosystem. And we hit hard.

   Also, it turns out that it is real understanding of the enormous, seismic force of Libre-Halaal software and Services that makes all of this possible.

5. **ByStar Is Already A Reality – It Needs To Grow To Intended Scale**. What has already been built is significant. What we want to build is immense. We think big and we execute gradually. Many seeds have been planted. Some flowers are blooming. A lot more remains to be done.

To say that ByStar is very complex and very ambitious would be an understatement. But it is more than plausible. It is viable and likely.

The Business Plan is supported by various websites and services. The primary entry point into the ByStar web collective is www.by-star.net. It is in the form of a "Dear Fellow World Citizen" letter.

The beginings of the Libre-Halaal ByStar Digital Ecosystem is now ready for public exposure. We have been at this for more than a decade. We hope to continue to be at this for a few more decades. So, if you want to dig deep, be prepared to spend some time as a lot is already in place.

1.2 An Open Invitation To Participate

The intended audience and purpose of our plan is very broad. The conventional business plan is intended for a narrow audience: the Venture Capitalists, and for a narrow purpose: to raise capital. But our plan is intended to communicate our business model and invite participation among many constituencies: engineering, business, investment, academia, and those concerned with guardianship of societal liberties.

There are two fundamental concepts at the core of what we are presenting and offering:

1. **Humans are more than just economic creatures and autonomy and privacy of the individual is sacred**.

2. **The Western Intellectual Property Rights (IPR) regime is a colossal mistake – Western IPR laws are in conflict with nature**.

A purely economically driven digital ecosystem puts humanity in danger.

If you recognize the distinction between humans and economic creatures and if you are willing to explore rejection of the Western IPR regime, then the Libre-Halaal ByStar Digital Ecosystem could well be for you.

As a first step, we ask you to review what we have written and built and give us your critique. If you think our work has merit, we also ask you to help us in spreading the word. Please feel welcome to further distribute this document where appropriate.

You can send us your comments, criticisms and corrections through the following
URL: http://www.neda.com/contact.

If you are a qualified investor, the open business plan itself describes further forms of participation, appropriate to the various intended audiences for the plan.

Groups of users (Autonomous ByStarEntities) such as student or staff at a university or High School or a corporation or a church or a mosque can join ByStar en masse and obtain ByStar services.

In a document titled:

> **A Strategy For Rapidly Becoming An Internet Application Service Provider**
> **Joining, Adopting and/or Licensing ByStar**
> **A Public Unsolicited Proposal**
> http://www.by-star.net/PLPC/180040

We describe various options for those interested in joining, adopting and/or licensing ByStar.

Your participation in any and all forms is greatly appreciated. Please accept our thanks in advance!

Neda's ByStar Open Business Plan

2 Digest - - Condensed Summary

We are building **The Libre-Halaal By* (ByStar) Digital Ecosystem**, a unified and non-proprietary model for autonomous internet services. ByStar (pronounced "by-star") is based on the model of Federations of Autonomous Libre-Halaal Services and is being presented as a moral alternative to the American Proprietary Digital Ecosystem.

By "Digital Ecosystem", we mean the whole thing, including inter-related software, systems, services, content and societal frameworks. The integrated facilities of ByStar are intended to be used by a very large segment of population on this planet. The scope of these integrated offerings is vast – paralleling most of what exists in the proprietary Internet today. The parallels include:

- A Gmail that recognizes your mailbox must be autonomous and private.

- A Facebook that respects your privacy.

- A YouTube that recognizes your content as yours.

- A Windows that creates a deep Software-Service continuum.

The equivalent of all of these in the ByStar model are unified, consistent and coherent.

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, advertising, customization consultation, general consultation and interaction facilitation fees. Significance and emphasis of these revenues source will evolve.

ByStar is not about any new particular functionality. It is not a faster, cheaper, better story. In terms of functionality, what we offer is generally same as what exists today.

Our primary offerings are: Tangible Autonomy and Tangible Privacy. On large scale there is a demand for this. Facebook, Google, Microsoft and Apple are in the business of exploitation of autonomy and privacy. The business model required for offering true tangible autonomy and tangible privacy is very different from traditional current practices.

Key distinguishing aspects of our approach and software and services are:

- Preservation of the individual's autonomy. ByStar services are inherently autonomous. They belong to their owner-user – not the service provier. Optionally, the user can possess the service.

- Preservation of the individual's privacy. The individual is in full control of her service. She can fully control her privacy.

- They are comprehensive, unified, consistent and cohesive. The scope of ByStar is everything. The "*" in By* comes from the glob expansion symbol. And all these services are unified with the ByStarEntity model.

- They are rooted in the correct manner-of-existence of software and services. The entirety of ByStar software and services are internally transparent. ByStar software and services development process is fully collaborative.

In other words, morality, health of society, and well being of humanity are an intgral part of software and services that we offer. Our work is primarily not Businessman driven. It is Engineer driven.

We believe that privacy, autonomy and freedom aspects of the Digital Ecosystem that we are creating are important enough to "convert" many existing proprietary service users to become Libre-Halaal ByStar users. All attempts at

claiming autonomy and privacy in the proprietary model are hollow at most. It is not possible to offer real and tangible autonomy and privacy without committing to complete internal transparency of software and services. The proprietary model leads to dark software and dark services (internally opaque) which are inherently anti-autonomy and anti-privacy.

To the extent that Venture Capitalists are an audience for this 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.

And, if any disrespect is ever directed towards Venture Capitalists in any of our communications, it is merely 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.

So, we are claiming to 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 should normally amount to not much more than pipe dreams. 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 have experienced all of that before twice – with Internet itself and with GNU/Linux (FOSS).

There are several reasons why we believe widespread usage of what we are building is more than plausible. It is viable and likely.

1. First ByStar ideology is in harmony with nature. We understand the enormous, seismic force that accompanies halaal manner-of-existence of software and halaal manner-of-existence of Internet services (as expressed in the Libre-Halaal label). Manifestations of this force include the Free Software Movement and Linux. But there is far more to come.

2. We have already built the needed framework and starting points. These are in place and are growing.

3. The ByStar model grand design is broad, evolutionary, expandable and it can grow to scale to planet wide usage.

4. The demand for autonomy and privacy are very real. Many are starting to recognize that things like Facebook are very wrong. Healthy alternatives are craved for.

5. The business and economic models for ByStar have been thought through and are being cultivated.

2.1   Problem: Individual's Autonomy and Privacy Are Being Crushed

In the Proprietary American Digital Ecosystem (Internet Application Services as they exist today), the individual's autonomy and privacy are being crushed. A deal has been made. Users free-of-charge get: email, calendar, address book, content publication, and facebook friends. In return, American corporations get: semantic analysis of email, spying with consent, traffic, logs and audit trail analysis and behaviour cross referencing.

A new currency has been created. The user's autonomy and privacy is now the implicit internet currency. For now, the established business model is that of translation of the individual's privacy into targeted advertising. That business model will naturally grow in scope. The debit side of this new currency is civilization and humanity.

Today, the world is largely unaware of this. The public is completely oblivious to the perils of the proprietary Internet model, and happily entrusts its personal data, its privacy, its freedoms and its civil liberties to proprietary

business interests. And the people whose responsibility it is to safeguard the public interest – government, and the engineering profession – are asleep at the wheel.

We begin by characterizing the existing proprietary digital ecosystem as fundamentally corrupt, and well on its way towards the destruction of humanity. Under immediate threat of destruction are the privacy of the individual, and the autonomy of the individual. There is already the beginning of dawning realization within society of the growing danger to these rights and freedoms. By the proprietary digital ecosystem, we mean the existing digital hegemony of companies like Facebook, Google, Microsoft, Apple, and others. Individually and collectively, we refer to these as the "Proprietary American Digital Ecosystem." This is to be contrasted with the healthy and Libre-Halaal digital ecosystem that is needed—and that we provide.

The Libre-Halaal ByStar Digital Ecosystem is not theory. A great deal has already been built. The needed framework and starting points are in place. ByStar is growing. Many use it.

To put it in its intended very widespread usage (planet wide), we want your participation.

We now present an overview of our work and the contours of ByStar in 4 regards – Ideology, Model, Capabilities and Economics.

2.2   ByStar Ideology

Digital ecosystems exist within societal frameworks. Digital ecosystems are shaped by societal norms and digital ecosystems shape people and society.

A very important aspect of societal framework which has immediate impact on shape of digital ecosystems are laws and models governing poly-existentials (knowledge, ideas, information, the digital domain). Societal Agreements governing all that is digital (and more broadly poly-existential) in the West is based on the Intellectual Property Rights regime. This has shaped the entirety of Western Digital Ecosystems.

Loss of autonomy and privacy are symptoms of the basic model of the Proprietary American Digital Ecosystem. At societal level, autonomy and privacy can not be preserved just with new technology. There are no band-aid technical solutions that can be applied to the proprietary digital ecosystem that can fix it.

In contrast, ByStar is ab-initio driven by the ideology that morality and health of society should be the foundation of the ByStar digital ecosystem. The fundamental difference between ByStar ideology and the Proprietary American ideology is that in ByStar priorities, society/humanity comes first and profit/economics come second. In the Proprietary American priorities profit/economics comes first and above all else.

2.2.1   Halaal and Haraam and The Libre-Halaal Label

Our focus as engineers is to build the right thing.

We introduce the sensitive and potent word "Halaal." We define this in the document titled:

> **Introducing Halaal and Haraam into Globish**
> **Based on Moral Philosophy of Abstract Halaal**
> http://www.by-star.net/PLPC/120039 — [5]

We precisely define what we mean by "Halaal" and "Haraam" and the explicit context and scope of the "Libre-Halaal" label. We use the word Halaal carefully and consistently to emphasize that our work is anchored in morality.

Briefly, philosophical halaal is "manifestation" of "moral sensibilities" relevant to a specific topic where "the set of actions" map to "right." And, philosophical haraam is "manifestation" of "moral sensibilities" relevant to a specific topic where "the set of actions" map to "wrong."

In the "Libre-Halaal" label, Libre indicates that:

1. The scope of consideration of Halaal is manner-of-existence of poly-existentials.

2. We reject the Western IPR regime. That the natural right to copy and the natural right to apply knowledge are the basis of our ideology.

Halaal indicates that:

1. We are rooted in philosphy and morality — Not just economics.

2. For each form of poly-existential, the manner-of-existence that permit Professions to safeguard society and humanity are the Halaal manner-of-existence for that poly-existential.

2.2.2 Nature of Poly-Existentials: Basis For Abolishment Of IPR

Next we attack the foundation of the proprietary ecosytem: the Intellectual Property Rights (IPR) regime of copyright and patents.

In a document titled:

> **The Nature of Poly-Existentials:**
> **Basis for Abolishment of The Western Intellectual Property Rights Regime**
> http://www.by-star.net/PLPC/120033 — [8]

We analyze and discredit the Western Intellectual Property Rights regime based on the inherent nature of what it seeks to control and restrict. All digital constructs are inherently Poly-Existentials. Poly-Existentials are poly-possessable. Assignment of restrictive ownership to what is poly-possessable is in conflict with nature.

The Western Intellectual Property ownership regime does not serve the ideal intended purpose of societal regulations, i.e. to balance rights equitably among conflicting constituencies. On the contrary, it has the effect of enriching a minority of powerful vested interests, to the very great detriment of society at large. The detrimental effects include the obstruction of engineering creativity, a distortion of the competitive business environment, and denial of the benefits thereof to the public.

Many societies fully reject the basic concept of patents and copyright. Yet, the Western Intellectual Property ownership regime is portrayed by Westerners as universal and global. Since poly-existence and digital entities are inherently not restricted by borders, the nature of global Internet demands rejection of the Western Intellectual Property ownership regime.

2.2.3 Libre-Halaal Software – Halaal Manner-Of-Existence Of Software

Next we focus on the correct manner-of-existence of software.

We do this in a document titled:

> **Libre-Halaal Software**
> **Defining Halaal Manner-Of-Existence Of Software**
> http://www.by-star.net/PLPC/180044 — [7]

Our definitions for Halaal manner-of-existence of software and Internet service are concrete and precise. These definitions are similar to the "Free Software" and "Open Source" definitions but are distinct. As engineers, our legitimacy for addressing this topic is our responsibility to the engineering profession and the engineering profession's responsibility to society.

We have created the http://www.HalaalSoftware.org site for further cultivation of the concept of Libre-Halaal Software.

Software (and more broadly Digital-Entities) is Libre-Halaal Software (and more broadly Libre-Halaal Digital-Entity) if it has the following attributes:

1. **Unrestricted Multi-Possessibility**. There are no restrictions is possessing the software by anyone who wishes to possess it – There are no restrictions in copying and redistributing copies.

2. **Unrestricted Usage**. There are no restrictions for using (running) the software.

3. **Internal Transparency**. The source code of the software is available. Unless software is internal transparent, the software can not be trusted.

4. **Proper Authors' Attribution**. The authorship of the software shall not be misrepresented.

5. **Perpetuality Of All Of The Above**.

2.2.4 Libre-Halaal Services – Halaal Manner-Of-Existence Of Internet Services

We then introduce the concept of "Libre-Halaal Services" and describe the model for guaranteeing internal transparency of Internet application services in a collaborative environment.

In the document titled:

> **Libre-Halaal Services**:
> **Defining Halaal Manner-Of-Existence Of Internet Application Services**
> **A non-proprietary model for delivery of Internet services**
> http://www.by-star.net/PLPC/180045 — [6]

We have formulated a radically new, non-proprietary model for delivery of Internet services.

Internet services are in essence access to remote execution of software. Fundamental Difference between software and service is Possessibility. Possession is personal and increases autonomy. Lack of possession decreases autonomy. Hence, software by nature is less of a threat than internet services are to autonomy.

Libre-Halaal Services are an extension of the principles of Libre-Halaal software into the Internet services domain. They are Internet services that can be freely copied and reused by anyone. The Libre Services model exists in relation to the proprietary Internet services model of Apple, MSN, Yahoo and Google, in an analogous way to how GNU/Linux exists in relation to Microsoft Windows.

We have created the http://www.LibreServices.org site for further cultivation of the concept of Libre-Halaal Services.

2.3 ByStar Applied Model Of Federations of Autonomous Libre-Halaal Services

In addition to being Libre-Halaal, ByStar is based on the Unified Autonomous model.

The Internet Services industry has arisen in a highly disorganized, unstructured way, driven by a multitude of uncoordinated commercial initiatives. The various industry capabilities have been built in an ad hoc manner, based on immediate business expedience, rather than by any sort of overarching engineering design. The result is the Internet Services industry as it exists today: chaotic, non-collaborative, uncoordinated, and falling far short of its true potential.

In contrast to this, the ByStar Digital Ecosystem is based on a coherent, collaborative, scalable, generalized Internet Services model.

Together, the Libre-Halaal Services and ByStar models have enormous implications. The Libre Services development model, and the ByStar unified services model, can transform the Internet completely, from the proprietary and ad hoc model of today into something far more powerful.

The realization of this potential is large, complex and ambitious. It is far too large in scope to be accomplished by any one company acting alone, but instead can only be accomplished as a coordinated industry-wide effort. But the ByStar Libre-Halaal Services model enables precisely the necessary large-scale, distributed, cooperative effort.

In the document titled:

The ByStar Applied Model
Of Federations of Autonomous Libre-Halaal Services
http://www.by-star.net/PLPC/180015 — [3]

We provide an overview of the model and design of ByStar Federation of Autonomous Services.

Based on this model and structures, ByStar services can consistently grow and interact with other ByStar services to provide a rich and healthy environment.

2.3.1 The ByStarEntity Concept

ByStar is based on a set of key abstractions, representing the major real-world entities that must be represented within a generalized web structure. These entities include such things as individual persons, businesses, physical locations, and events. For each such entity we have defined the structures and conventions required to represent, instantiate and name that entity in a unified consistent way, and at a very large scale. We have then defined the major classes of services required to manage these entities, and to allow highly generalized interactions within and among each other.

In the ByStar applied model, a real-world entity type (for example individuals or a physical locations) maps on to a `ByStarEntityType`. A real-world entity instance maps on to a `ByStarEntity`. All ByStar services are anchored in `ByStarEntity`.

Each `ByStarEntity` can be activated within a `ByStarAutonomyAssertionVirtualMachine`. The representation of a `ByStarEntity` in a `ByStarAutonomyAssertionVirtualMachine` is called a `ByStarServiceObject`. A `ByStarServiceObject` maps to a Unix account and a user-id.

`ByStarServiceCapability` is a set of capabilities that any `ByStarServiceObject` can be provisioned to offer. The software of the `ByStarAutonomyAssertionVirtualMachine` determines the possible set of capabilities. These capabilities grow as ByStar grows. The current set of capabilities are enumerated in Section 2.7.

Any `ByStarServiceCapability` can be bound to and publicly exposed through a registered domain name.

2.3.2 ByStar Autonomous Services

ByStar services are structured in two layers. (1) ByStar Autonomous Services and (2) ByStar Federated Services.

Any ByStar Autonomous Service may also include ByStar Controlled Services.

An Autonomous Libre Services is a Libre Service where the primary user of the service is the "owner" of the service. The concept of Autonomous Libre Services focuses on preserving privacy by providing control over information to users with safe guards of functional transparency, information portability and non-retention controls. Formal definitions are provided in Defining Halaal Manner-Of-Existence Of Software – And Defining Halaal Internet Application Services

Each autonomous Libre-Halaal service is anchored in a `ByStarEntity` and can offer any of the ByStarServiceCapabilities.

In Figure ?? we present the way that Autonomous Libre Service, Federated Libre Services and User Environments are structured.

2.3.3 ByStar Controlled Services – Internet Of Things

Any ByStar Autonomous Service may control its "ByStar Controlled Services".

A ByStar Controlled Service is a ByStarEntity which is in control of ByStarAutonomousEntity.

For example, consider an individual (say the author – http://mohsen.1.banan.byname.net) who hypothetically owns a house, a bicycle, a nike fuel band and a tag for his suitcase.

Virtual representation of these could be:

1. A House – http://info.1-98008-5807-10.bywhere.net – where ByWhere structure links control to its owner (a ByStarAutonomousEntity).

2. A Bicycle – whose location information goes to it owner (a ByStarAutonomousEntity) and not Google-corporation.

3. A Nike Fuel Band – which send the exercise information to its owner-individual (not Nike-corporation).

4. A tag for his suitcase – which links to it owner (a ByStarAutonomousEntity).

Each of these as a ByStarControlledEntity will be controlled by the ByStarAutonomousEntity. All of these are ByStarEntity-s. The ones that are controlled, link to their controller. The ByStarAutonomousEntity has links to all the ByStarControlledEntity-s that it controls.

So, we now have a framework for abstracting individuals as owners/controllers through ByStarAutonomousEntity. And we have abstractions for things to be owned and controlled through ByStarControlledEntity. And we have way a framework for interaction of individuals/things and things/individuals through ByStar Federated Services.

Now, compare the model of ownership and interactions of Things in Libre-Halaal ByStar Digital Ecosystem – which is anchored in the autonomous individual – with the Proprietary American Digital Ecosystem – which is anchored in the Proprietary Corporation. There the proprietary internet service provider controls individuals also through Things.

2.3.4 ByStar Federated Services

Autonomous services and their conrolled services may wish to engage in end-to-end interactions with other autonomous services. But in order to facilitate such interactions, involvement of some intermediary services may be needed.

We refer to such enabling intermediary services as **federated services**, and we refer to the association of a federated service plus its subscribing autonomous services as a **federation of autonomous services**.

The concept of Federated Services is layered above Autonomous Services and focuses on interactions amongst Autonomous Services and facilitation of information aggregation amongst ByStar Services.

An example of a federated service for information aggregation is ByTopic.org where autonomously published content (documents/music/video) is optionally centrally republished – autonomous and federated publication are fully consistent.

2.3.5   ByStar Convivial User Environments – Blee and BxGnome

Users experience ByStar Services through ByStar User Environments.

ByStar services can be accessed in a variety of ways. In addition to the traditional browser based model, ByStar provides for rich and deep Software-Service integration.

Initially we are focusing on two convivial, [4], User Environments for ByStar.

Blee (ByStar Libre Emacs Environment) is a layer above Emacs that integrates ByStar platform (Debian GNU/Linux) capabilities into emacs and provides for integration with ByStar Services.

An overview of this User Environment is provided in:

> **Blee and BxGnome:**
> **ByStar Software-Service Continuum Based Convivial User Environments**
> http://www.by-star.net/PLPC/180004 — [13]

The deep integration of Libre-Halaal Software and Libre-Halaal Internet Services creates a Libre-Halaal Software-Service continuum, far superior in capability to any Proprietary/Haraam Software/Service combination.

2.3.6   ByStar Content Generation and Content Publication Facilities

ByStar offers a rich environment and a number of facilities for content generation.

Autonomous Content Publication facilities are a well established feature of ByStar.

In the document titled:

> **ByStar Content Production and Publication Facilities**
> http://www.by-star.net/PLPC/180038 — [16]

we describe capabilities and features of ByStar content generation facilities and ByStar autonomous content publication facilities.

Autonomous self publication can then be augmented by information aggregation federated services such as ByTopic, ByContent and BySearch.

2.4   ByStar Central

The basic design of ByStar is very distributed. Services are autonomous and interactions are usually end-to-end.

This means that ByStar is centrally light. But there are some fundamental and infrastructural and foundational organizations and services that are required at the center of ByStar.

The following infrastructure and foundational organizations have been put in place towards administration, guardianship, direction setting and facilitation of collaboration and growth of ByStar.

2.4.1   The Free Protocols Foundation – non-profit, non-proprietary

Free Protocols Foundation is the non-profit legal entity that facilitates collaborative development, maintenance and administration of ByStar.

2.5   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.

2.5.1   LibreCenter.net

LibreCenter.net is Neda's data center. It is distinct and different from other data centers in that is built purely on Libre/Halaal Software. At this time most ByStar Services are hosted at Libre Center.

2.6   BySource.org

BySource.org is the Software Distribution Center for ByStar software in source form.

2.6.1   ByBinary.org

ByBinary.org is the Software Distribution Center for ByStar software in binary form.

2.6.2   ByStar Name and Number Assignment Authority

ByStar Name and Number Assignment Authority is responsible for central assignment of names and numbers for ByStar services.

Design of ByStar as an ab initio independent separate digital ecosystem permits ByStar to expand beyond the Proprietary American Digital Ecosystem. This is desired and possible for two main reasons. First, ByStar ideology may demand certain separations. Second, end-to-end purity of ByStar software-service continuum enables ByStar to do things that are not possible in the Proprietary American Digital Ecosystem.

ByStar's Public Key Infrastructure (PKI) and the possibility of a ByStar Alternative DNS Root are some examples.

2.7   Current ByStar Services and Capabilities

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

Here we provide a summary of where ByStar services stand today.

A snap shot of the organizations, services and software that form the ByStar Digital Ecosystem today are shown in Figure 1.

Free Protocols Foundation central resources are shown in violet in 1. Neda resources are shown in yellow. 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 blue.

The current status and growth of of ByStar falls into four broad categories:

1. Current Capabilities of ByStarEntity (ByStarServiceObject) – what any autonomous services is capable of offering.

2. Current Span of ByStarEntity Generators – What type of autonomous services (ByName, ByArtist, BySmb, etc) can be readily generated and supported.

3. Current Scope of ByStar Federated Services.

4. Scale of User Base – how many people are using ByStar?

2.7.1 Current Capabilities of ByStarEntity (ByStarServiceObject)

Every ByStar autonomous service is anchored in a ByStarEntity. Every ByStarEntity can be provisioned to provide any of the current capabilities enumerated below.

- ByStarEntityIds and credentials – single password. [Unix account based]

- PKCS – ByStar Public Key Infrustructure (PKI) – Credentials.

- Autonomous VPN services and ByStar overlay networks. [openvpn based]

- Large amounts of autonomous disk space. [secure ftp based]

- Autonomous synchronization and version control facilities. [git – and also svn and cvs based]

- A Content Management System based website – with both public and private access. [Plone based]

- A conventional public web-site. [Apache based]

- e-mail and LibreTexting. [qmail, imap, webmail, etc. based]

- Content publication services. [Plone based]

- A photo gallery. [galleria based]

- Genealogy web services. [geneweb based]

- Matched User Environment Profile. [Blee based]

Various other capabilities are in the works. With the ByStarEntity model in place, addition of features is quite simple.

2.7.2 Current Status of Span of ByStarEntity Generators

A number of ByStarEntity Generators—the machinery required for fully automated creation of new service instantiations—are in place for a number of ByStarEntityTypes. Current ByStarEntity Generators are shown in Figure 1 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.

In Section 2.7.4, "Growth Of User Base: Timing" we explain the rationale for not having enabled the self-service account creation feature at this time.

2.7.3 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 1 under the "ByStar Federated" label.

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

2.7.4 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 user base, to demonstrate demand and marketplace viability of the service, and lay claim to a particular portion of functional territory. This was 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 model. 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 our industry model play, a different timing strategy is required.

First, as a superset 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 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 model and the By* design, and the value of the resulting services to paying clients.

But 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, [17].

2.8 Relationship With Existing Realities

The Libre Services and By* models are revolutionary, and can be expected to have a revolutionary effect on Internet usage. But these models are about service development and functionality, not about technological infrastructure. We are not reinventing the Internet protocols, or any other technical aspect of Internet operation.

What is being presented here is not a tear-down and rebuild operation.

Libre Services and By* imply no discontinuity, in terms of either technology or service deployment. The implementation model for Libre Services and By* is wholly evolutionary—there exists a continuous migration path from the proprietary model of today to the Libre model of tomorrow.

2.8.1 Relationship With The Proprietary American Digital Ecosystem

Based on ideology, the Libre-Halaal ByStar Digital Ecosystem fully avoids proprietary software and proprietary services. We simply avoid The Proprietary American Digital Ecosystem.

But, any and all of our services can be used in the Proprietary American model.

The core of ByStar software is subject to the Affero v3 General Public License and also the Neda Commercial License (dual licensed).

In a document titled:
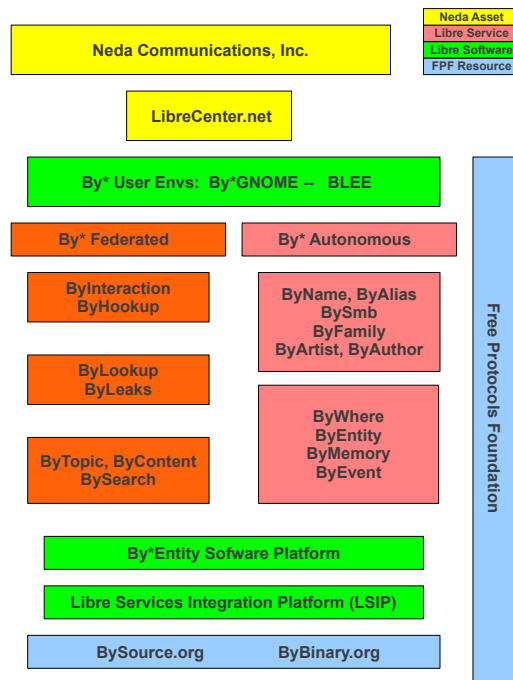
Figure 1: Current ByStar Services and Capabilities

A Strategy For Rapidly Becoming An Internet Application Service Provider
Joining, Adopting and/or Licensing ByStar
A Public Unsolicited Proposal
http://www.by-star.net/PLPC/180040 — [14]

We describe various options for those interested in joining, adopting and/or licensing ByStar.

2.8.2 Relationship With FOSS / FLOSS / FreedomBox Movements

Free and open-source software (F/OSS, FOSS) or free/libre/open-source software (FLOSS) is software that is both free and open source. It is liberally licensed to grant users the right to use, copy, study, change, and improve its design through the availability of its source code. In the context of free and open-source software, free refers to the freedom to copy and re-use the software, rather than to the price of the software.

Libre-Halaal ByStar Ideology and FOSS Ideology have a great deal in common and we closely collaborate with our FOSS brothers and sisters, but the ByStar Libre-Halaal Ideology is distinct.

We invite our "Free Software" and "Open-Source" brothers and sisters to recognize that the "Libre-Halaal Software" model is a more complete model and that the "Libre-Halaal Software" label is a better label.

2.8.3 Active Private Parallel Digital Ecosystems – Example: NSA

What we want to do on very large scale and in the open has been done in medium scale in private.

14

For instance, the United State's National Security Agency (NSA) has created a separate parallel private digital ecosystem for its own use. NSA operates the private .nsa TLD; many NSA internal email addresses are of the form username@r21.r.nsa, mirroring the NSA organizational group structure. NSA has a particular ideology for its digital ecosystem which includes a large element of security, confidentiality and secrecy. NSA through use of its own particular software and services has created a complete different environment in parallel to the internet.

Precedence of such private parallel digital ecosystems combined with the proven power of Libre-Halaal software demonstrates that widespread realization of ByStar digital ecosystem is very viable.

2.9 ByStar Economics

Having introduced the Bystar Halaal Digital Ecosystem in philosophical, moral, societal and engineering terms, we now turn our attention to the economic and business dimensions.

We are devout Capitalists. The existing capitalist model for mono-existentials is generally correct, in both philosophical and economic terms. But the extension of the mono-existential capitalist model into the domain of poly-existentials, based on the Western IPR regime, is a grave mistake. Philosophically it is wrong. Societally it is harmful to humanity. And economically it is unstable and vulnerable, since it can be displaced by disruptive business models like ours. The Open Business Plan you are reading explains how this will come about, and how we will profit from this.

2.9.1 The For-Profit Non-Proprietary Quadrant

The notion of a non-proprietary construct, residing and operating within the for-profit sector, is new and different. Historically, the for-profit sector has been closely associated with proprietary ownership of assets. Hence the Internet Services industry as we see it today. Also historically, management of non-proprietary or public assets has been primarily associated with the non-profit sector. Hence the current orientation of the Free Software Movement, operating largely within the non-profit sector.

The Libre-Halaal Services deployment model breaks both these traditions. It represents a radical shift of the Internet Services industry from the for-profit, proprietary quadrant, to the for-profit, non-proprietary quadrant. In this space the entire software for an Internet service remains a communal public resource in the trust of the engineering profession, while service deployment is driven forward by the full force of for-profit commercial motivations.

In the document titled:

The For-Profit and Non-Proprietary Quadrant
http://www.by-star.net/PLPC/120042 — [2]

We provide more details on this topic.

As shown in Figure 2, the By* services are positioned in the For-Profit Non-Proprietary Quadrant For Internet Services.
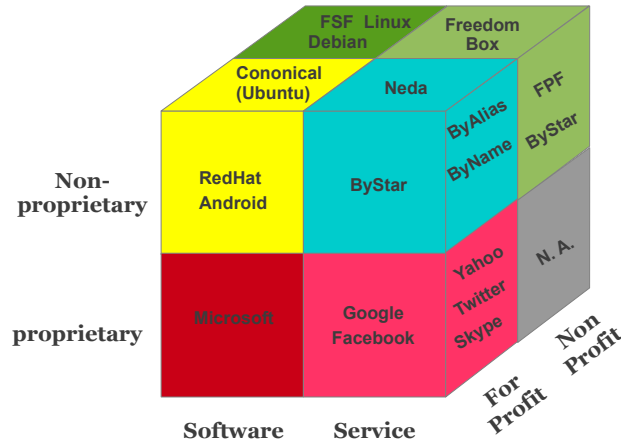
Figure 2: The For-Profit Non-Proprietary Quadrant For Internet Services

As shown in Figure 2, the By* services are positioned in the For-Profit Non-Proprietary Quadrant For Internet Services. Note that in the non-proprietary layer, re-use and collaboration is far richer than the proprietary layer. For example, in the Software slice, Debian and Ubuntu cross progress. In the Services slice the same can happen. Where for example ByStar and FreedomBox can cross progress.

2.9.2   ByStar Value Chain Analysis

ByStar value chain is a chain of activities that we perform in order to deliver a 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 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 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 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 Repect, translate into "stickiness" – where the user is more committed to the service. So, you see, all our investments in ideology are actully also business wise.

All of the ByStar value chain software is Libre-Halaal (Free and Open Source) software. ByStar software in Figure 3 is shown in two different colors.

The software in bright blue 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 refered to as
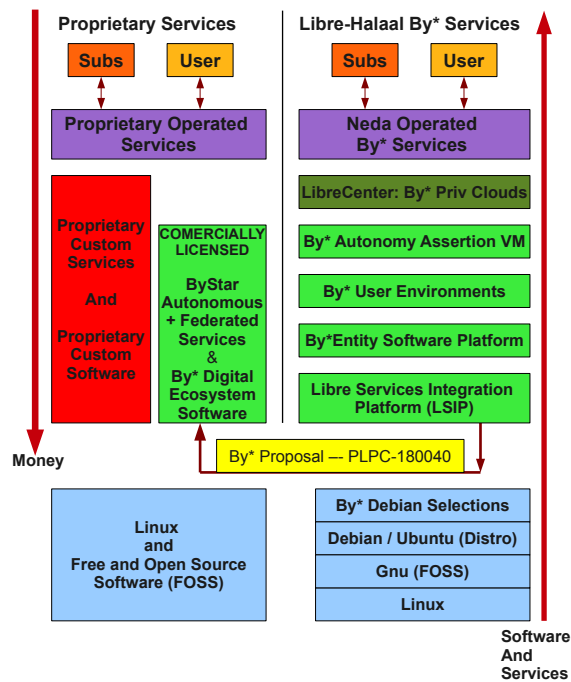
Figure 3: ByStar Value Chain

ASP loophole.

The software in bright green 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. Those ASPs not wishing to do so, can use ByStar software through the Neda Commercial License.

In the left column of Figure 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 **Neda Libre Services Integration Platform** (Neda-LSIP) [1].

Design of LSIP and the **ByStarEntity Software Platform** recognize 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.

2.9.3   ByStar Open Business Plan

The exposition above, is the condensed summary of our 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 — [15]
>http://www.neda.com/StrategicVision/BusinessPlan

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

Our business plan is viable because we understand the critical dynamics of poly-existentials. The current direction of the Internet services industry does indeed present a grave hazard to humanity, and we will indeed safeguard humanity against this. These extraordinary claims provide a unique and powerful marketing message. And they also happen to be true.

2.10   The Full ByStar Picture

The big ByStar picture is shown in Figure 4. Each of the layers in this figure represents either a conceptual definition (shown in blue), or an actual software/service implementation (shown in orange). Each layer builds on the layers beneath.

Figure 4 can be used as a reading roadmap.

The top layer paper is:

>**The Libre-Halaal ByStar Digital Ecosystem**
>**A Unified and Non-Proprietary Model For Autonomous Internet Services**
>**A Moral Alternative To The Proprietary American Digital Ecosystem**
>http://www.by-star.net/PLPC/180016

It describes the totality of libre/halaal software, libre/halaal Internet services, content generation and content publication facilities and societal frameworks that are designed for Preservation of ByStar user's autonomy, privacy, freedom and health of society. In that document we analyze the stresses and forces acting against the existing proprietary American digital ecosystem, and we identify four critical "tear points," where the existing proprietary hegemony can be broken, and invaded by the ByStar ecosystem. The execution of this business plan is focused on those four tear points.

Figure 4 shows how the moral, legal, societal, engineering, economic and business dimensions of the ByStar Halaal Digital Ecosystem are layered as described above.

Note the differing characterizations of this layering on the left and right. Both characterizations are valid, but they reflect entirely different viewpoints. The left side characterization is called "The Human Model," and reflects the philosophical, moral and societal elements of the model. It also identifies the role of the engineering profession in maintaining these elements. The right side characterization is called "The Venture Capitalist Model," and is very different from the "The Human Model." The same elements are present, but now represent their significance as part of an investment strategy. Thus the moral and societal concerns within the human model are now viewed as a sales and marketing opportunity. This makes clear that when dealing with Venture Capitalists, issues of morality
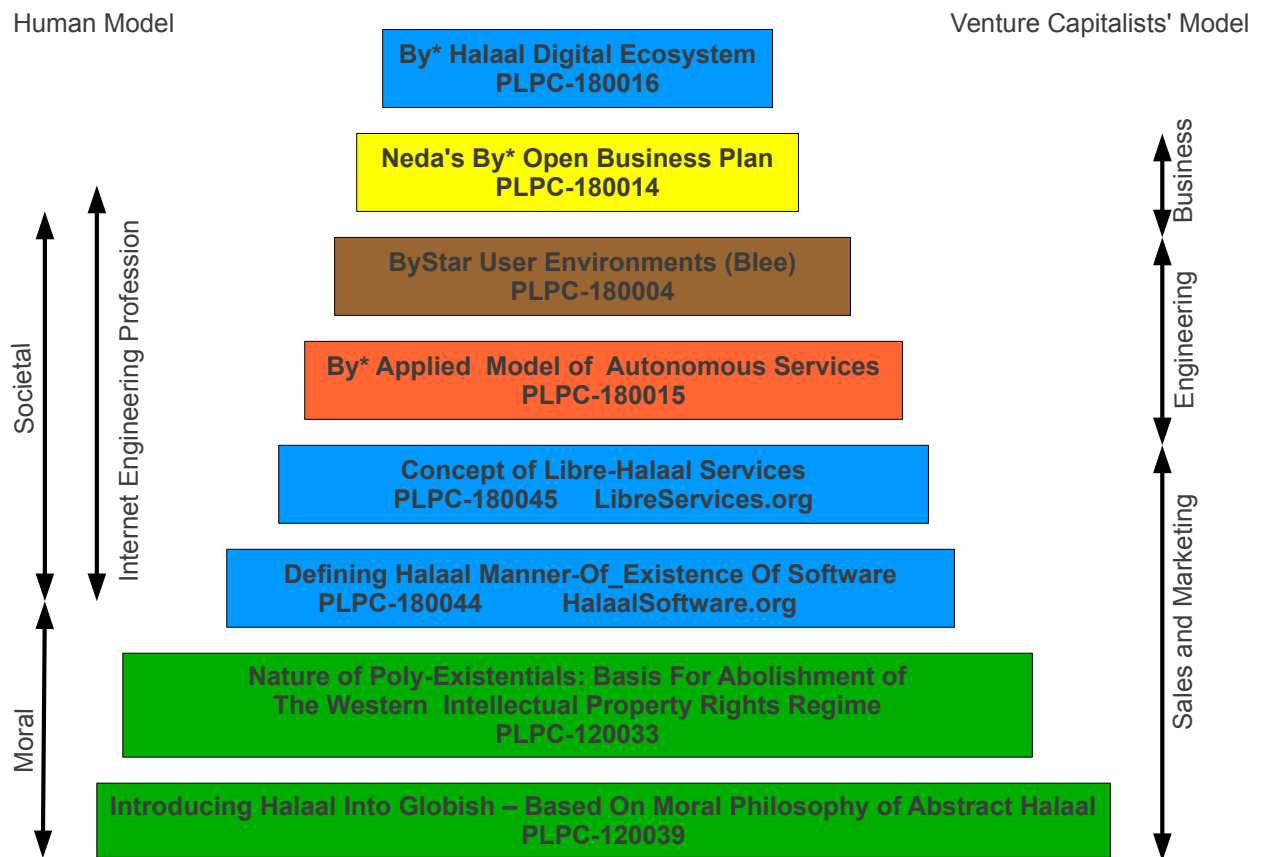
Figure 4: Reading Roadmap For The Libre-Halaal ByStar Digital Ecosystem

and societal welfare are not the topic of discussion. In this regard Venture Capitalists need only understand that human beings are in fact concerned with vital moral considerations such as "privacy" and "autonomy," and that these considerations have powerful sales and marketing consequences. And that our unconventional strategy of overturning their sacred-cow – Copyright and Patent model – gives us a huge competitive advantage.

The gigantic picture we have drawn in Figure 4 is a blueprint. It represents a complete framework for collaborative work towards an alternative to the current proprietary digital ecosystem. By aligning ourselves with the natural forces and dynamics of poly-existentials, and by means of large-scale unrestricted collaboration, we can achieve this. And we can collectively save humanity.

2.11 Key Innovations, Participant Challenges, Your Responsibilities

Buying into what we have presented, requires that our audience (you: reviewers, potential investors and potential participants) overcome a number of barriers. In addition to the intellectual difficulty of following the logic, cohesion, consistency and viability of such a huge and complex proposal, there are also psychological, cultural and belief system barriers that you need to overcome.

To assist with that, we first enumerate some key aspects of our innovations that are likely difficult to absorb.

2.11.1   Key Innovations – Things We Understand Well That Others Don't Get

The design, architecture and structure that we have presented for ByStar includes a good number of elements that are innovative. These are subjects and concepts that we understand in depth and that many others just don't get. These include:

- Rejection of IPR based on nature of poly-existentials. – PLPC-120033

- Ramifications of manner-of-existence of poly-existentials on health of society, professions, economics and business. – PLPC-120033 – PLPC-120042

- The need for a label for the "right" manner-of-existence of poly-existentials. Our rationale for choosing the Libre-Halaal label instead of the common (primitive) FLOSS label. – PLPC-120039 – PLPC-180046

- The need for erection of a new parallel digital ecosystem whose primary purpose is to preserve autonomy and privacy of the individual to stand against the Proprietary American Digital Ecosystem. – PLPC-180016

- Design and architecture of AutonomousEntities at the center of ByStar leading to re-decentralization of the internet based on the end-to-end model of interactions in contrast to the rise-of-the-middle proprietary model. – PLPC-180047

- Design of the Universal BIASOS software based on the convivial "On Unix" philosophy. – PLPC-180047

- Proof that the equivalent of everything that is being done in the Proprietary American DE can also be done based on the ByStar's AutonomousEntities model. – PLPC-180048

Properly combining and structuring all of the above innovations, is our ultimate innovation.

2.11.2   Reviewer Challenges

The ability to think and analyze at the full scope of an entire digital ecosystem is rare. Many reviewers can not begin to consider that the current model is fundamentally wrong and that it needs to be corrected at its foundation. And, that it is possible to do so.

Many reviewers of this document 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. Such reviewers would not wish to recognize that the logic that we have presented is correct. It is not in their interest to understand.

Many reviewers of this document are likely Americans or Westerners who do not recognize that design of proper global digital ecosystems should not be just rooted in Western models and values. Our use of terms such as "Halaal" likely does not sit well with that audience.

The belief system of many reviewers of this document is Americanism. The current Proprietary American model is perceived as economically beneficial to them and they would have no interest in seeing ByStar disrupt it.

In order to fully understand the logic and value of ByStar, the reader of this business plan is expected to be more than an economic creature and need to recognize that human values and not just economics should drive the design of human oriented digital ecosystems.

2.11.3   Your Responsibilities

Existing trends within the Proprietary American Digital Ecosystem are towards crushing of more of the individual's autonomy and privacy which in due course will result into destruction of civilization and humanity.

As an alternative to the Proprietary American Digital Ecosystem, there is nothing else out there that comes close to ByStar.

Those who deny the validity of the above statements and those who don't wish to be concerned with it, have chosen to have no particular responsibility. They can simply invest and/or participate in ByStar for their own profit. That form of passive financial participation is perfectly acceptable.

For those who understand that the Proprietary American Digital Ecosystem poses a danger to humanity, participating in ByStar becomes compulsory. For those, this is not just an invitation to invest and participate. For those, investing and participating in ByStar is a responsibility.

3   Executive Summary

3.1   About Us

Neda Communications, Inc. is an Internet Application Services company. We provide consulting and Internet services to small-to-medium businesses (SMBs) and to individuals. We are a one-stop full-service shop—we maintain our own Data Center, and we provide a full suite of services for clients requiring any sort of Internet presence. Our revenues derive from the customary sources: consulting, website development, hosting, and subscriber service fees.

So far, there is nothing unusual about any of this.

But our technological model for delivering services, and our long-term strategic vision, are very different from the mainstream. Our Internet services model is radically different in two respects, each having major consequences. First, our Internet services are based on the free software development model. And second, they are a unified services model. For these reasons our model has the potential to transform the Internet Services industry completely, and become the new model for delivery of Internet services, planet-wide.

But first, a bit of stage setting.

3.2   Setting the stage

Part of the debate about free software is now over, while part continues. The part that is over is any question about the viability of free software as a development model for creating large-scale, complex, relevant software systems. GNU/Linux is a fully viable free software alternative to the proprietary Microsoft Windows operating system, against which it continues to make steady inroads. Mozilla is a fully viable alternative to the proprietary Microsoft Internet Explorer, and is also experiencing steadily increasing usage. These and numerous other free software projects—Apache, Qmail, Sendmail, Bind, Plone, Snort and many others—have now become essential and widely used components throughout the software and Internet industries.

And apart from such well-known and high-profile projects, behind the scenes the free software movement has become a flourishing creative environment, generating a constant stream of new and better software packages, duplicating and surpassing the capabilities of an ever-increasing portion of proprietary software territory.

And the fundamental free software creative dynamic has now also become very well understood: the free software development model allows *unrestricted creative reuse of existing assets at essentially zero cost*. It is from this dynamic that the free software model derives its tremendous generative power. Free software is thus fully established as a generative engine and an industry reality, and is here to stay.

But the part of the debate that continues is whether or not this has any meaningful commercial dimension. Within the proprietary software domain a powerful revenue-generating engine exists in the form of the traditional software licensing model. But this revenue source is absent under the free software model. In its place there are a number
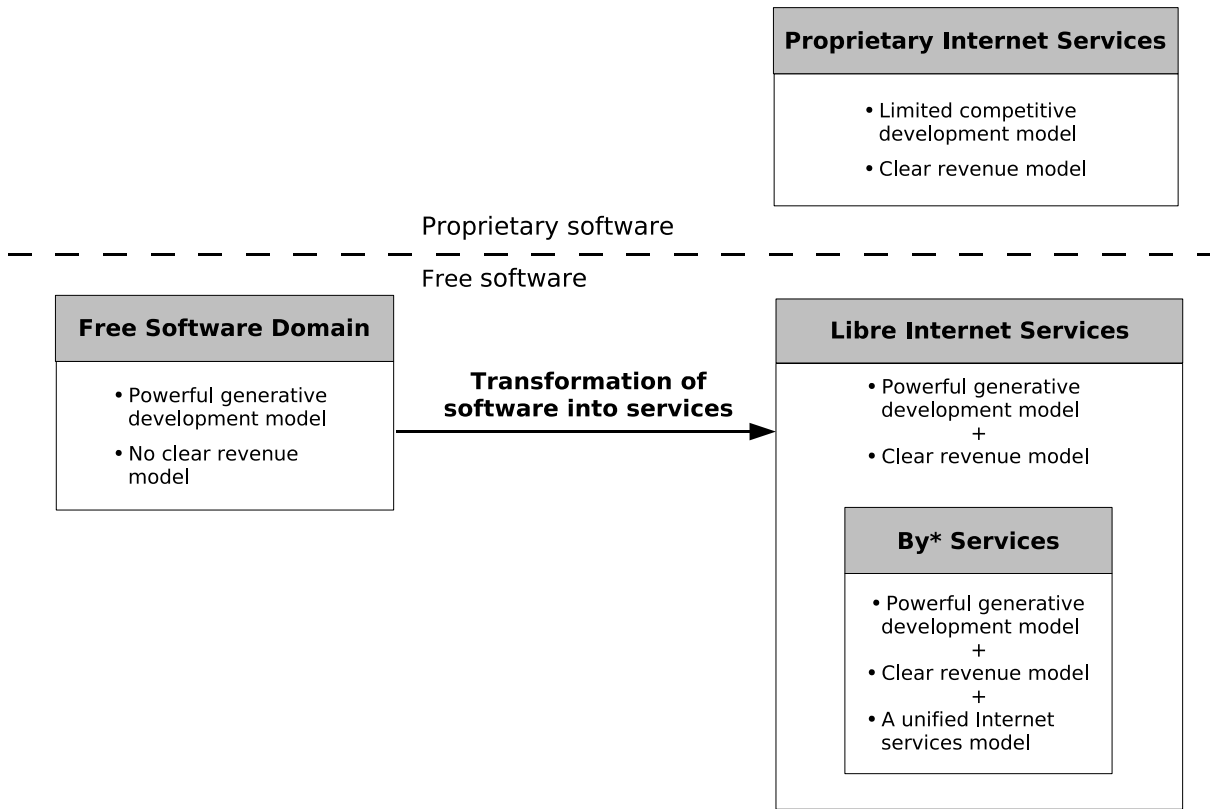
Figure 5: Business Ramifications Of Software To Service Transformation

of possible business and revenue models, but in all cases these lack the large-scale repeatability that makes things really interesting from a business perspective.

There thus remains a conceptual gap, a puzzle, about how the powerful generative forces of free software can be turned into a large-scale, repeatable, revenue stream. But this puzzle is now solved. And in this business plan we present the solution.

3.3 The transformation of software into services

The Internet has given rise to an enormous new industry: the Internet Services industry. And within this industry the business and revenue models are quite clear and obvious. The largest and most obvious are the subscription fee model of generalized service providers such as Facebook, and the advertising model of numerous specialized no-cost service providers, demonstrated most spectacularly by Google. Both the subscription fee and advertising models are unlimitedly scalable, thus resulting in the gigantic commercial Internet of today.

But the Internet Services industry of today is a fundamentally proprietary construct. While proprietary service providers can and do make frequent use of free software components within their services, they do not espouse the free software development model itself, and their technical development process remains competitive and proprietary. Though they may incorporate free software components, Facebook and Google are certainly not free software.

Thus as we look at the software and Internet industries of today we see two largely disjoint cultures. As illustrated in Figure 5 we see the free software domain, with its powerful generative and propagative development model, but lacking any clear large-scale monetization model. And separate from this we see the proprietary Internet Services domain, with enormous revenue and business consequences, but handicapped in scope and scale by its competitive development model.

But now we are witnessing a further transformational event in the evolution of the Internet: a shift of traditional software applications towards a service-based implementation, or what is sometimes called the "transformation of software into services." And this is the critical event that now solves the free software revenue puzzle. This development unites the generative power of the free software domain with the proven revenue models of the services domain. The transformation of software into services *allows the powerful generative model of free software to be invested directly into the powerful revenue model of the Internet Services industry.*

3.4   Free and proprietary software: cultural incompatibility

But how is free software to fit into the proprietary Internet Services domain? The answer is: not very well. As we have noted, a proprietary service provider can make use of free software components. There are many open source software packages which are typically subject to the free software General Public (GPL) License license (or similar) which permits their inclusion in proprietary services. This is often refered to as ASP loophole. The likes of Google, Yahoo, and Facebook take advantage of the ASP loophole routinely. But by doing so the service provider is taking only limited advantage of free software. To take full advantage of the energy and productivity of free software, the service provider must do more than this—it must adopt the free software development model itself.

But a service provider cannot adopt the free software development model, while remaining a proprietary service. The free and proprietary software cultures are fundamentally incompatible, and a company cannot commit to both value systems at the same time. Within the free software culture, software is considered a communal public resource. Within the proprietary culture, the basic software proposition is *this-is-mine-and-you-can't-have-it*. The conflicts and contradictions between these two value systems are too many and too pervasive for them to coexist within the same organization.

A successful company requires clarity of vision and unity of purpose, and must therefore define itself. So in the matter of software patents, copyright and trade secrecy, the company must take a coherent position. Either these intellectual property constructs are part of its business model, and its corporate mentality, or they are not. With a foot in both camps, the company is fundamentally conflicted.

A proprietary service provider is thus greatly limited in its ability to fully participate in and benefit from the generative power of free software. What is required instead is a new model for Internet services, one that is fully aligned and consistent with the free software development model. We call this the Libre Services model.

3.5   The Libre Services model

Libre Services are an extension of the principles of free software into the Internet services domain. They are Internet services that can be freely copied and reused by anyone. Any company or organization can reproduce and host any Libre Service, either for its own use, or for commercial or non-commercial delivery to others. The Libre Services model exists in relationship to the proprietary Internet services model of Facebook, MSN, Yahoo, and Google, in an analogous way to how GNU/Linux exists in relation to Microsoft Windows.

Thus the Libre Services model, like the free software model, allows *unrestricted reuse of assets at zero cost.* In the case of Libre Services the assets in question are services constructs rather than software constructs, but the end result is the same: Libre Services reproduce the powerful generative and propagative forces of free software within the Internet Services arena.

Like free software, Libre Services are a genuine public resource, not owned by anyone, freely available for reuse

by anyone. They are created by society, for society. This means that the services are inherently aligned with the interests of the user. Under the proprietary model there is an inescapable dichotomy of interest: that of the user on the one hand, and that of the proprietary service provider on the other. But under the Libre Services model, this dichotomy is dissolved. And by virtue of being free and open, Libre Services guarantee a set of critical civil liberties that are not guaranteed under the proprietary services model—indeed, that are routinely violated under that model.

To the business mentality it may seem quaint, even comical, to advance such ethical considerations within the context of a business plan. But these critical characteristics of Libre Services represent a profound motivation for acceptance and usage of the services by society. It will take some time for this motivation to become apparent, but it is there, and its effects are real.

3.6   The By* model

The Libre Services model is one radically different dimension of our services model. There is a second dimension, also radically different, and also having major consequences. This relates to the capabilities of Internet services in purely functional terms. Whether proprietary or Libre, what can the services actually do, and how well can they do it?

There is no question that Internet Services represent a phenomenally dynamic, thriving industry, bringing revolutionary new computing and communications capabilities to the world, and accompanied by equally phenomenal business opportunities. This much is obvious.

But the Internet Services industry of today is also a gigantic mess. It has arisen in a completely unplanned, disorganized, chaotic manner, lacking any sort of uniformity or consistency of structure, and in many ways it is wildly dysfunctional. This is not so obvious. But as software and Internet engineers, having been actively involved in the technical Internet from the beginning, we know this to be the case.

And while this may not be apparent to the everyday user, having never experienced anything different, this limits the capabilities of Internet services in many ways. The Internet Services industry of today, dynamic and thriving though it may be, is in a sense crippled. It falls far short of what it can be, and what it can do, if designed for full, consistent, uniform interoperability across all types and manners of service usage.

The By* model solves this problem. By* is a unified services model, unifying and making consistent a large number of services that currently exist in functional isolation. For example there is Yahoo. And there is Craigslist. And there is Facebook. But there is no connectivity or integration among these, though such joint interoperability would greatly augment the capabilities of all these services. As with technology in general, proper integration creates a new construct, bigger and better than the sum of its parts.

Today, a user's Internet experience is scattered across numerous disparate services. In particular, a user's personal presence on the Internet—her individual data and self-representation—is fragmented and duplicated among a multiplicity of service providers. Today she has many usernames and many passwords. Under the By* model, she will have only one.

By* is a coherent, integrated family of services, providing the user with a comprehensive, all-encompassing Internet experience. It includes services for individuals (ByName, ByNumber, ByAlias, ByMemory), services for business entitities (BySMB/ForSMB), services relating to physical locations (ByWhere) and events (ByEvent), and services for publication of information (ByTopic). Last and most important, By* includes a set of services allowing complex interactions among persons, businesses, and things (ByInteraction).

In terms of end-user functionality the services will eventually provide a large superset of the computing and communications capabilities that exist today. Meanwhile the services are evolving and will continue to evolve towards this goal. Up-to-date details about the current and planned capabilities of each service are provided on the service websites themselves. A complete list of all service websites and their supporting documentation is provided in Section **??**, "Summary of references and pointers."

By* is the model for a new generation of Internet services, far bigger and far better than the uncoordinated mishmash of services that exist today. By* is the Internet services industry, done right.

3.7 Our strategic vision

As shown in Figure 5, the By* services embody a set of attributes that exist nowhere else in the Internet services industry. By virtue of being Libre Services, they are a proper vessel for receiving the creative productivity of the free software development model. And also by virtue of being Libre Services, they reproduce that same creative productivity within the services domain. By virtue of being Internet services, they inherit the gigantic revenue engines of the proprietary Internet services domain. And by virtue of being a unified services model, they far surpass the capabilities of the existing, functionally fragmented industry.

All this gives the By* model enormous potential. By* can become the new model for delivery of Internet services, at the scale of the entire planet. Our ambition is to lead By* forward to the full realization of this potential.

To many, this ambition will appear implausible and unrealistic. But it is based on the tremendous generative power of the free/Libre model. Though few understand this, a watershed event is currently taking place within the software industry: the proprietary software model is being overtaken by the free software model. The battles will continue for years to come, but the war is already lost: the proprietary model is marked for extinction, and the future is free software. As engineers, as software experts at the forefront of our industry, we have recognized this well ahead of the industry at large—and certainly far in advance of the business community. Though the demise of the propriety software industry may seem implausible today, this is already as much a reality as global warming.

Without a clear understanding of this reality, none of what we are saying makes sense. With this understanding, all of it does. We are a small group of engineers who fully understand the power of the free/Libre model. What will make all of this work is the extraordinary generative power of Libre, and our ability as engineers to shape and direct this power to extraordinary effect.

3.8 This is all real

So far, everything we have said has been theoretical. Let us now turn to the practicalities of the matter. By now it will be clear to the reader that what we are proposing is rather colossally gigantic. But we have been actively working on this initiative since 2001, and our implementation is now well advanced. In terms of what we have built, this written Business Plan is just the tip of the iceberg.

Far from being empty theory, all this has substantive reality. Libre Services and By* are not just an abstract concept or a distant mirage. They are real constructs that we have built and are delivering to our clients today.

- **A real conceptual foundation**. We have fully defined and documented the Libre Services concept. We have also enabled this model by establishing a formal framework for industrywide participation in Libre Services development. This component of our work has been done under the auspices of the http://www.FreeProtocols.org, a non-profit organization separate and distinct from Neda. Complete details are provided in Section 7.2, "Libre Services participation."

- **Real services**. We have implemented the initial components of By* and established a starting point set of services. The various By* services and websites are summarized in Table 2. The services are in varying stages of development—some in operation, others under active development, and others at concept level only. But the initial services are in place, and the rest will follow. The current status of all By* services is summarized in Table 5.

- **Real clients**. By* services are currently in use by a number of our individual and business clients. The scale of usage is small, but nevertheless these are real, supported, working services. Examples of existing individual and BySMB users are provided in Table 3.

- **Real assets**. We have been actively working on this initiative since 2001, and we have created a complete conceptual blueprint and a coherent set of assets to turn our ambitions into reality. A description of the relevant assets and their current status is provided in Section 10, "Status and Assets."

  We host the By* services at our own Data Center, and this is therefore a particularly important asset. The Data Center is complete and operational in all respects, and capable of supporting all By* services up to medium operational scale.

- **Real revenues**. There are multiple revenue sources associated with the By* deployment. In addition to the subscription fee and advertising models already mentioned, Libre Services and By* create a number of additional revenue sources not present under the proprietary services model. All revenue sources are described in Section 8, "Revenue Models," and summarized in Table 4.

- **A real company**. Neda Communications, Inc. is a well-established company with a proven track record of technical proficiency and profitability. Neda was founded in 1991, and between 1991 and 1997 operated as a successful data communications consulting company, with average revenues from 1993 to 1997 of over $1 million annually.

  Since 1997 Neda has exercised active leadership in an evolving series of industry initiatives, leading up to the present By* initiative. Over the past several years our vision and focus has been the creation of the assets required to execute this Business Plan. To date Neda has received no external financing. Details are provided in Section 13, "The Company."

- **A real team**. Neda has a core team of engineering and management personnel with extensive experience in the technical Internet and data communications fields. Among the team there are relationships going back many years, reflecting a long history of productive cooperation. In particular the following key team members have worked together closely and committedly on this initiative since 2001:

  Mohsen Banan. Mr. Banan is the founder of Neda Communications and the team leader. He is the intellectual originator and visionary behind the Libre Services and By* concepts. His professional biography is available at his public ByName site at: http://mohsen.banan.1.byname.net/ProfessionalBio

  Andrew Hammoude. Dr. Hammoude represents the written word of Neda Communications. All mission-critical exposition of the Libre Services and By* concepts has been created by him. He has been with Neda since 1999. His professional biography is available at his public ByName site at:
  http://andrew.hammoude.1.byname.net/ProfessionalBio

  Pinneke Tjandana. Ms. Tjandana has built a large part of the operational and developmental components of the By* services. She has been with Neda since 1998. Her professional biography is available at her public ByName site at:
  http://pinneke.tjandana.1.byname.net/ProfessionalBio

  Information about other Neda team members is available at:
  http://www.neda.com/AboutNeda/CompanyProfile

It's all real, and every day it gets realer.

3.9   Key execution strategies

We have formulated a coherent execution plan for deploying the By* services, developing the various revenue streams, and moving this initiative forward over time. Complete details are provided in Section 9, "Execution." In the following sections we describe some of the key elements of our execution strategy.

3.9.1 Marketing strategy: Engineering vs. Business polarization

We are facing a major service uptake challenge. First, we are in a very crowded and noisy arena. The general Internet services domain includes many established services, plus a constant stream of new commercial initiatives, all competing for user attention. The domain of social networking services is a particularly intense focus of competitive activity at present, and By* asserts its own emphatic presence in this domain also.

Furthermore, we are latecomers in an increasing returns business. Many existing service providers already have a large and growing base of users, with whom they have an already established relationship.

A big part of our service uptake challenge is met by the inherent growth dynamics of the Libre and By* models themselves. These are discussed at length in the document titled, *The By* Concept: A Unified Model for Internet Services* [12].

But in addition to this, a strong marketing message is required to differentiate By* from other services, and pull subscribers away from existing providers. We have a coherent and powerful set of marketing messages to address this requirement. These are:

- The By* services, by virtue of being Libre Services, are inherently on the side of the user. No proprietary service can make this assertion, and this provides us with immediate differentiation from all existing Internet services.

- By* provides a total, integrated Internet services solution, delivering everything needed by the user. This is in contrast to the existing patchwork of functionally fragmented services, each delivering only a component of what is needed.

- The metaphor of a war between Engineering and Business.

In our first marketing message we position By* as inherently aligned with the interests of the user, in contrast to proprietary services which are ultimately aligned with the interests of the provider. But we will go much further than this. We will broaden this message into something much bigger: we will actively promote a *militant polarization of Libre as an Engineering construct, versus proprietary as a Business construct.*

Today, the Internet services industry is owned entirely by business interests. But the Libre Services and By* initiatives represent a startling challenge to this: they represent a determined reassertion of proper guardianship of the Internet by Engineering. This challenge will bring us into massive conflict with existing commercial interests, who will fight ferociously to defend the status quo.

Table 1 shows the many elements of contrast between the Engineering and Business value systems. As the table makes clear, these two values systems are in complete and total conflict. We will fully exploit this conflict as the metaphor of a war: a war between Engineering and Business, in which Business represents exploitation of the Internet for profit, and Engineering represents guardianship of the Internet on behalf of the public.

We are thus taking an assertively militant, combative position. We have had previous experience in generating attention by this means. In 2000 we wrote and widely distributed a document titled, *The WAP Trap* [10]. This was a public exposé of WAP, a shoddy and exploitative business construct. *The WAP Trap* successfully created interest and press coverage; for details see http://www.neda.com/AboutNeda/News/WrittenAboutUs. Our highly assertive By* marketing messages will create publicity and press coverage in much the same way, though we expect on a much larger scale.

Our marketing messages are new, powerful, unique, and cannot be asserted by any other service provider. Together with the inherent growth dynamics of the By* services themselves, these marketing statements can create broad cultural acceptance of the Libre model, and can pull users away from the existing proprietary providers.

Engineering Values	Business Values
Patent-free	Patented
Copyleft	Copyright
Transparency	Secrecy
Public ownership	Private ownership
Sharing, collaboration	*this-is-mine-and-you-can't-have-it*
Guardianship	Exploitation
Libre Services	***Proprietary Services***

Table 1: Engineering vs. Business Polarization

3.9.2 Marketing jujitsu: business based on non-business

Marketing is about perception, not reality. But it is worth noting that our marketing messages are, in fact, wholly congruent with the underlying reality. The central element of our message, that the By* Libre Services are inherently on the side of the user, is perfectly true. It is true because they are a purely engineering construct, created solely in the public interest, and not beholden to any private commercial interest. When the message is congruent with the reality, the result is a tremendously powerful marketing imperative.

Today, the public is generally oblivious to the perils of the proprietary services model, and cheerfully entrusts its personal data, its privacy, its freedoms and its civil liberties to proprietary business interests. But this will change. And as it does, as general public awareness grows, our marketing messages will resonate ever more strongly with the public, the media, and our fellow engineers.

The By* services are unique in that they are a business model based on the Libre model, which in turn is an engineering construct residing entirely in the public domain. We are thus using the inherently non-business nature of the By* services as a critical element of our business strategy. This is the unique marketing jujitsu made possible by the Libre model.

3.9.3 Marketing synergy: Libre Services leadership

The full scope of this initiative includes two distinct dimensions: the public side, represented by the general Libre Services concept, and the commercial side, represented by the Neda By* services and this business plan.

We have described above our By* services marketing strategy, centered around By* as a commercial offering by Neda. But in addition to this we are the visionaries and leaders of the broader Libre Services movement, and this provides us with a further unique promotional vehicle.

Libre Services are new and interesting. They are altogether unlike the existing proprietary model. They are a genuine communal resource, created by Engineering as a gift to society, inherently aligned with the interests of the users, and providing guaranteed guardianship of personal freedoms and civil liberties. This is new and different. It is interesting, puzzling, and thought-provoking. Above all, it is newsworthy. Our leadership role in the Libre Services movement will bring us a unique level of visibility and name recognition.

Our leadership of the Libre Services movement and our marketing of the By* services are strongly synergistic: attention directed towards one naturally brings attention to the other. We will therefore conduct a strategic coordination of these two activities: we will assert our leadership of the Libre Services movement in close coordination with the initiation of our By* marketing campaign. In this way we will greatly amplify the effectiveness of both.

Furthermore, both of these activities create the opportunity for revenue growth by Neda. We will therefore coordinate the above two activities with a third: the public exposure of the By* services as a revenue-generating engine.

We will execute all three activities at precisely the correct moment: the moment at which we are able to deploy and

support the By* services at scale. This triply coordinated execution—of Libre leadership, of By* marketing, and of By* services exposure—will bring unique visibility to Neda. By choosing this moment correctly, we will turn that visibility directly into revenues.

(*Nota bene.* Throughout this Business Plan we are focused on the success of the By* services as a commercial initiative, and in this section we have described how our promotion of the Libre Services movement contributes to this success. But it must be emphasized that this does not imply any marginalization of the Libre Services movement, or the subordination of the goals of the Free Protocols Foundation to those of Neda.

This initiative includes two major dimensions, and each is an essential requirement for the other. Just as the Libre Services movement provides the essential context for By*, so the existence of a coherent business model is essential for widespread deployment of Libre Services. These two dimensions are closely interdependent, and success of one contributes directly to the success of the other.)

3.9.4   Engineering development model

As we have noted, the free software movement is a flourishing creative environment, constantly producing new and better functional software components. Indeed for any particular functionality there are typically multiple alternative free software packages available.

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 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 **Neda Libre Services Integration Platform** (Neda-LSIP). Neda-LSIP is a comprehensive set of tools and conventions for the transformation of software into services. Neda-LSIP is the key technological component of our realization of the concept of Libre Services, allowing practical and cost-effective aggregation of free software components into coherent services. Neda-LSIP is free software itself, available under the Affero GPL version 3 license. For complete details see the document titled, *Neda-LSIP Design and Implementation Notes* [1].

Moving forward, we will continue to select and incorporate additional functional components into By* as these materialize within the free software environment. This is the extraordinary magic of free software: 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.

3.9.5   Engineering design for scale

By* is designed to be big. Big in every respect: in terms of functional scope, in terms of depth of integration, and in terms of numerical scale. Our goal is to establish By* as the new model for delivery of Internet Application Services for all individuals, and all businesses, everywhere. The intended scale for By* is the entire population of planet Earth.

Every aspect of our model and execution strategy is directed towards achieving this numerical scale. In particular, all our engineering design decisions have been made with scalability as a critical requirement. For example:

- Overall design of the By* services is based on a highly distributed architecture, with no inherent number limits. The services are unlimitedly expandable in terms of hardware infrastructure.

- An important design decision is the selection of the right free software components for integration into By*. All software components have been chosen with scalability as a key requirement.

- A consistent naming scheme is essential in order to create object instantiations at extremely large scales. The By* architecture incorporates a hierarchical naming model, based on consistent and extensive use of the Internet domain naming system. This allows the naming and addressing of unlimited name spaces within the By* structure.

- We built our own in-house Data Center right from the beginning, giving us the ability to scale up without requiring an initial colocation phase. With our own Data Center we can scale up operations efficiently and economically, under a wide range of operational contingencies. The Data Center can support deployment of By* up to medium operational scale.

3.9.6   Focus on model, scope and scale

This is a model play. This is not about a new product or service, as these are commonly defined and bounded. This is about an entirely new paradigm for Internet service deployment and usage.

Thus what we are building here is *inherent model potential*. We are not building limited service functionality for a limited scale of delivery. Rather we are building gigantic potential: for the creation of vast scope of functionality, and global scale of delivery.

Throughout our execution strategy we maintain proper focus on this goal. In particular our major effort has been devoted initially to defining the Libre model, designing the By* architecture, and building the machinery necessary for large scale execution. With these critical enabling components in place, only then do we attempt to deploy By* as a large-scale service.

Certainly, we could have invested our initial effort in building and deploying By* as robust services, and creating an initial user base. But this would amount to a traditional service play, not a model play. This would leave us with a service in place, but without the powerful generative model characteristics that give By* its planet-wide potential, without our unique leadership role, and without our model-based marketing messages.

3.9.7   Collaborative binding: an open vertical keiretsu

The Libre model creates an entirely new business environment in terms of competition, collaboration, and value chain relationships.

In the proprietary model, businesses can and do enter into technical collaboration and strategic partnership. But within such partnerships, the partnering companies remain intensely focussed on intellectual property ownership considerations. Even before any serious discussion can take place, the prospective partners implement restrictive Non-Disclosure Agreements (NDAs) to protect each other's trade secrets. And when the partnering companies are eventually able to agree on the nature and scope of a collaborative project, technical development takes place in the context of closely negotiated agreements about who owns what, and how patents, copyrights and royalties are to be divided among the companies.

Thus proprietary technical collaboration, like porcupines mating, includes a strongly anti-collaborative component.

The Libre Services model, however, represents a complete renunciation of the existing intellectual property regime. (Indeed, we consider the very term "intellectual property" to be problematic, implying as it does an extension of the logic of physical property ownership into the non-physical realm of software and ideas.) Under the Libre model, software and services are a public resource, owned by no one. Patents and copyright are rejected entirely. With these (so-called) intellectual property constructs out of the way, there are no obstacles to collaborative services development and integration. The Libre model is thus inherently collaborative in nature.

Yet within the Libre environment, other perennial business considerations remain in full force. Competition and strategic maneuvering remain alive and well, but these take place at points of contact outside the technical development arena. Fundamental business questions remain, such as: What are the natural business alliances? How is risk to be shared among such alliances? How are revenues and profits to be divided?

The Libre business environment is new, and in time it will establish its own conventions to negotiate and settle these questions. The details of how this will occur is not our concern or responsibility. However it is our responsibility to define and maintain our own strategic positioning within this environment.

By* Libre Services creates a new, extremely large and complex value chain. Our key strategic positioning within this chain is as the top-level services aggregator, having a direct relationship with the end user. This positioning presents Neda with unique opportunities and responsibilities. Our unique opportunity is to profit from this position. Our responsibility is to promote and enlarge the value chain, while maintaining our positioning in the face of strategic actions by both competing and collaborating companies.

The elimination of proprietary competitive tensions from the technical development arena, together with the shared anti-IP mindset of collaborating companies, creates a new form of binding among value chain partners—what we call an open vertical keiretsu. We invite others to join us in expanding and profiting from By*. If you have a Libre component that fits well and that you wish to integrate into By*, or if you are interested in a longer-term business relationship for development of a particular branch of By*, please http://www.neda.com/ContactUs We have ample Neda equity available to promote early-stage business partnerships.

3.9.8   Competitive advantages

The Libre Services industry presents an entirely new competitive environment. For any provider deploying a Libre Service, it is no longer possible to maintain sustainable advantage on the basis of proprietary service ownership. Nor is it possible to create advantage on the basis of functional service differentiation from other providers.

A complete discussion of our competitive advantages within this environment is provided in Section 11, "Competitive Advantages." But there are two in particular that provide us with unique advantages over any potential competitor:

- We are the originators and architects of Libre Services and By*, and we are playing a unique leadership role in their industry-wide promotion and deployment. There can be only be one leader, and we are it.

- By* is a total services solution, vast in scope, highly scalable, designed for the long-term, big picture future of the Internet. This immense scope is reflected in the By* design architecture. The design is sophisticated and complex, allowing highly generalized interactions among the many By* components.

  This represents vision, depth of understanding, and a far-reaching intellectual investment. This cannot be easily replicated or understood by others. Yet we have a clear understanding of By* in every detail. This depth of understanding will guide our deployment and strategic maneuvering for years to come. This amounts to a major conceptual lead time over any potential competitor.

3.10   Where we are today

In broad summary this is where we are today:

- Articulation of the Libre Services conceptual model is complete and fully documented.

- We have built the assets and infrastructure necessary for widespread exposure of any part of this initiative. This includes a comprehensive website presence, and a sophisticated e-mail capability for highly efficient marketing and communications operations. See Section ??, "Summary of references and pointers," for a summary of our very extensive website assets.

- Overarching design architecture for the By* services is complete. It is also implemented sufficiently for someone with the necessary technical skills to understand the integrity and philosophy of design, and the architectural characteristics in terms of functional scope, depth of integration, and numerical scalability.

- Implementation of the By* services themselves is in progress. In terms of functionality, the initial services are already sufficiently complete for deployment and usage. A number of example implementations are in place; these are summarized in Table 3.

  In addition, the By* Factories—the software machinery required for fully automated creation of new service instantiations—are also complete and in place. 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.

  However the services are not ready in terms of security, operational manageability, and scalability. Substantial work remains before we can support large numbers of users reliably and efficiently. This is the last remaining phase of work to be accomplished before we can deploy the services at large scale.

3.10.1 An immense construct

Over the past several years we have built something quite extraordinary. We have built a sophisticated machine, that when set into motion, can redefine the entire global Internet.

And we have done all this based entirely on our own determination, hard work, and committment. Everything we have built thus far has been driven by our own efforts, without external funding, financed entirely by our revenues as a consulting company. We are a small team, and we have foregone company revenues and personal income over an extended period. Yet despite these sacrifices we have stayed together and continued to work committedly on this since 2001.

The results, we believe, speak for themselves. This business plan is the topmost element of an immense construct. Section ??, "Summary of references and pointers," provides a roadmap to the many interlocking elements of this construct. We invite the reader to take a look, and see for yourself.

3.11 Moving forward

Moving forward from this point we will execute the following items:

- We will complete the final leg of technical work required to support large numbers of users.

- At the right moment we will initiate a coordinated exposure campaign. We will make widespread exposure of the general Libre Services model and claim our leadership role; we will initiate our highly assertive By* marketing campaign; and we will make public exposure of the By* services themselves.

- We will continue to seek consulting projects and Internet services clients that are well aligned with our strategic objectives.

- We will seek out business partners with whom our strategic direction has strong resonance. An important component of this is our strategy for seeking out By* service deployment partners; this is described in a separate document titled, *The By* Family of Libre Services for Network Service Providers: A strategy for rapid entry into the Internet Application Services market* [17].

- We will continue to augment the framework for participation described in Section 7, "Framework for Participation."

- We will continue to expand the services in terms of functionality, and we will continue to harden our deployment infrastructure in terms of security and operational manageability.

- Based on all the above, we will begin to scale up the services and develop a growing, recurring revenue stream.

Beyond the above near-term items, the large scope of this initiative permits great flexibility of execution. By* has great breadth and depth; it is the equivalent of multiple conventional business plans rolled into one. And as we discuss in Section 8, "Revenue Models," it includes many opportunities and revenue streams. This multiplicity of opportunity allows our execution to be readily adapted to changing circumstances. Our overall execution plan is therefore highly reactive and responsive to events as they unfold.

In terms of By* service functionality, at this point we have established a stable functioning system, which will form the basis for ongoing engineering development. Moving forward from here we will execute an incremental implementation strategy, continuously adding new functionality and expanding the scope of this stable system.

Scaling up of the services will be contingent upon the availability of appropriate resources. The By* Factories are ready, but we will not exercise these at large scale until we are ready to accept the associated maintenance and support demands. In the meantime we will continue to populate and expand our Data Center usage at a small-scale, controlled rate.

Our general exposure campaign will likewise be contingent on circumstances. The assertion of our leadership role and other exposure activities are a matter of degree, and can be executed to greater or lesser extent. We will execute exposure in proportion to our ability to scale up the services and convert that exposure into revenues.

Other aspects of our execution plan are similarly reactive. In terms of external financing, the plan is fully adaptable to the availability of financing, addressing the full range of possible financing contingency. In particular we have a coherent execution plan for a wholly self-financed mode of operation; details are provided in Section 9.4, "Adaptability to financing."

3.12 The need for broad participation

Based on our own efforts, we fully expect that we will complete the final phase of technical work, and we will reach the critical threshold at which the By* services begin to generate a growing, recurring revenue stream.

But there is what we can do on our own, and there is what we cannot do.

Neda now stands at an absolutely critical point in its development. Over the past several years we have built an extraordinary revenue-generating machine. But despite its phenomenal potential, this machine cannot generate any meaningful revenue until it is complete, and until it is exposed. We are now moving towards a crucial moment: the moment at which this machine begins to turn.

On our own we can and we will reach this critical threshold. But we cannot sweep up to and beyond this threshold swiftly and with certainty. We cannot exploit the many By* revenue opportunities intensively and in parallel. And we cannot deploy By* at the very large scale for which it is intended.

Though we have created a model with enormous potential, though we have a unique leadership role and unique marketing messages, our ability to convert this gigantic opportunity into revenues is desperately limited. On our own we are limited to a small-scale, incremental mode of execution. In this mode we cannot execute rapidly, intensively, and at large scale. We are simply too small, and we do not have the resources.

A small team is ideal for conceptual analysis, model articulation, and architectural design. All this we have accomplished. But now we need to bring in others. With what we now have in place, we are now ready and the time is right for us to move forward to planet-wide scale. And for this we need people, we need business partners, and we need investment.

3.12.1 An Open Business Plan

These documents are available for readership by anyone. In particular, in what we believe is a first in the history of business practice, we are publishing our business model in the form of an Open Business Plan, intended for widespread distribution, analysis and criticism.

This is highly unorthodox, but essential for the realization of our goals. The deployment of By* at its intended scale cannot be accomplished by Neda or any other company acting alone. Rather this can only succeed as a general industry-wide movement, involving buy-in and participation by many others. In particular this initiative requires the participation of three major consituences: the engineering community, to build the necessary Libre Services infrastructure; the business community, to deploy and deliver Libre Services to end-users; and the investment community, to finance engineering and business development. All these prospective participants need to understand the model in its entirety, including its business dimensions.

3.12.2 An invitation

This initiative is not about a conventional product or service. It is about the reinvention of the global Internet Services industry, on the basis of a radical new services model. It is about leadership, and capitalization on that leadership in business terms. It promises to be exciting, and rewarding, in the execution.

We have created a gigantic opportunity, and with the right participation we can turn this opportunity into gigantic revenues. And to enable such participation we have established a comprehensive framework for participation; details are provided in Section 7, "Framework for Participation." In particular we have ample equity available to motivate participation by team members, partners and investors. In the case of investment participation, our financing model is described in Section 14, "Financing."

If you are interested in taking part in this venture, then please read on. And if not then please feel free to pass our Open Business Plan along to any other interested person.

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