Adopting Powerful Information Technology and Web Systems to Power Member Communities in a Non-Profit Organization

Report Prepared For: Autism Edmonton

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"Change is the law of life. And those who look only to the past or present are certain to miss the future."

- John F. Kennedy

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Summary

Per the request of Lauren McGuinness, Autism Edmonton's Manager of Programs and Services, this document was prepared to **provide input and a preliminary (basic) analysis** regarding Autism Edmonton's IT infrastructure, which ultimately plays a key role in managing Autism Edmonton's data and information, their community outreach, and effectiveness in communicating with members.

After discussing my role as a volunteer for the "Navigation Project", which would have involved the "Next Steps" PDFs, I had many questions and concerns regarding the current (manual) tools and systems in place at Autism Edmonton. Therefore I was asked to offer my professional point-of-view and feedback on the current state of IT/ website/ membership management/ communications at Autism Edmonton, taking into consideration the limited information readily available.

The key points to take away from this analysis:

1. An **IT working group** needs to be established.
2. Autism Edmonton is a **social network** that needs further online development and integration with their home page on their website.
3. Adoption of a web-based **member management system** and **database** is necessary.
4. The website should be a one-stop **portal,** a special-purpose, vertical market site that can provide a focused, in-depth community base and relevant content.
5. An **online file administration system and knowledge library** must be developed. This is key for members, partners, volunteers and staff.
6. Adopting **web-based tools** that are well-integrated across the organization will automate most processes that currently rely on humans, freeing up valuable manpower to do more productive activities that can help the organization and its resources grow.
7. **E-Marketing** and the use of **metrics** is key to understanding your membership, and IT is the best way to reach your membership.
8. The majority of web users and website visitors use **mobile devices**, not a desktop computer. Information (and access to it) must be **mobile friendly** and focused on providing great **user experience**, or members will not find value in using the website (or rely on Autism Edmonton for support). There are also new **navigation systems** that help users find customized answers to their challenges.
9. IT is a tremendous opportunity for additional sources of funding by employing innovative **revenue models** through **e-commerce** and **data mining**. It also helps organize groups that can **crowdsource** and **crowdfund** projects and causes.

Information Technology Advisory/ Working Committee

Autism Edmonton should form an "Information Technology Advisory/ Working Committee" (IT group) right away to manage what already exists, and to plan for and implement better systems. Issues exist that need to be immediately addressed and put the organization at risk. This approach will save time and money and make operations more streamlined. Staff will have better tools to work with. More can get accomplished. Money can be better utilized on activities that produce more measurable results.

Firstly, the main issue here is how Autism Edmonton has set up and views their "interface" with the demographic they are trying to engage with, and serve. A second issue is the "back-end interface" system (for managing their website and office/ management activities, such as the server and hardware/ software to perform day-to-day tasks). Thirdly, from first glance and some initial questioning/ experiences, Autism Edmonton relies on some archaic systems (i.e. email, person-to-person telephone assistance, office visits, etc) in order to complete work, and to provide the bulk of information and services to their constituents.

While these older systems are somewhat still necessary, they need to be complemented with a more modern approach. The interfaces that our society now relies on are Internet-enabled devices and information systems. This lets computers and software tools do most of the heavy lifting, which relieves staff and volunteers of many redundant activities.

Where there are manual (hands-on) systems in place at Autism Edmonton (i.e. tracking phone calls, volunteer hours, or "statistics" on paper), there should be a priority placed on finding the right mix of tools that Autism Edmonton needs and can adopt. Any organizational "strategizing" or plans moving forward **must consider IT as the main goal** – everything hinges now on engaging better with society and community **online**. This is especially so in the non-profit world where there is so much competition for grant and philanthropic sources.

There are better (often lower-cost or free) tools that a computer can manage in real-time, without any of the delays that traditional human managed systems create. This helps an organization serve MORE people, getting more revenues to invest in further growth and services. The Internet is ubiquitous and allows for anyone, anywhere, anytime to access information and perform tasks, regardless of "staffing" availability.

At least 2 people should be committed long-term to leading this IT group, which should consist of folks with an IT background (i.e. two "IT" industry professionals already sit on the Board) and key staff members (i.e. the "Communications" role and the "Manager of Programs and Services", at the very

least). This group would naturally be the formation of the "essential link" that reports and recommends IT strategies/ systems/ activities to the Board, and communicates directly with staff/ IT contractors of Autism Edmonton.

The Board of Autism Edmonton should rely on the "specialists" and the "users" with the experience, and those who can recommend how the IT should be managed and further evolve at Autism Edmonton (who does what, what needs to be done, when it will be implemented, where exactly the systems and tools will exist, who will have access to what, and what the budget should be), not the other way around. Non-IT folks discussing IT will often result in adoption of a hodgepodge of ideas and products (that not only compromise the privacy of members, but they do not integrate well, and "break" the system). Non-IT folks can also be "misinformed", or not current with the landscape of the ever-changing Internet and web technologies. These factors can result in slower adoption rates of systems and tools (especially if there is too much bureaucracy). Also, poor communication and misconceptions result, in addition to "politicking", all leading to wasted time and money.

The following proposed methods of managing IT, the website, the membership, and communications will save time, be more cost effective, and more efficient long-term. Any innovation requires flexibility and the ability to adjust (quickly) to meet the needs of your customers (members).

Steps to form a Technology Advisory/ Working Committee (IT group):
1. Every effort should be made to **canvas every member** of Autism Edmonton (and others with a vested interest in improving the delivery of Autism Edmonton's services). Find experienced and interested people who could be a part of this team, or those who are just able to provide advice.
   a. Use an advertisement on the website, email, Facebook, Twitter, phone calls, etc. to reach as many people as possible.
   b. **Create a master spreadsheet of contacts that is managed and updated centrally by staff/ volunteers.** This will also help sift through the membership/ contact data and correct errors/ make updates (email addresses) and ensure data is consistent. This will prove necessary in the future to import data into whichever contact/ member management system will be chosen. Use the "Open Office" spreadsheet – to build data compatible with Excel, as it produces outputs that conform to open standards.

2. It is essential to regularly **perform market research** on Autism Edmonton's current state of IT, including **how users "experience" their interactions with Autism Edmonton's "community".**
   a. [Survey Monkey](#) can be used to reach members (confidentially and anonymously) by email and on Facebook pages. Data derived in this fashion can be more accurate and honest. In the future, surveys could be done using the CMS (Content Management System) and CRM (Customer Relationship Management) system.
   b. Market research questions should be prepared by someone experienced in market research and data collection, and results derived from the research should be specific, measurable and actionable.
   c. At least 250 people should be able to provide input (a goal should be reached for a response rate), especially if the membership is over 2000+ at Autism Edmonton. This will help provide a broad response rate to garner more accurate data.

3. Set up a **Saturday Workshop** (at least a month in advance of invites).
   a. It should be facilitated by someone who is experienced in managing workshops to elicit feedback (positive and negative) and ideas from multiple stakeholders and members.
   b. Use sticky notes, poster boards and other simple tools for attendees to brainstorm.
   c. Take photos of all notes/ sticky notes generated while they are up on the walls for future reference (and keep them).
   d. This will help **determine system requirements and a "wish list" for Autism Edmonton.** It is key to note that determining system requirements cannot be done in "a bubble" or in "secret" by those who are not actually going to implement or adopt the overall IT strategy, because it will be doomed to fail if the administration/ users are not part of the creation of the strategy. The Board of Directors alone may not be equipped to know (in detail) what needs to be done, or how it should be implemented (plus these types of activities are usually beyond the scope or interest of volunteer Board members).

4. Following the initial workshop, additional dates could be set for **"feedback" or "brainstorming" sessions with multiple members, industry experts and partners** that can help **provide details and solutions** that will help address the current state of IT at Autism

Edmonton. More on what could be done (or collaborated upon) should most definitely include other agencies that are also serving the same market: those on the Autism Spectrum.

5. From these activities and the collection of data and information (facts are what should determine the path, not "gut feelings" or "past experiences"), then Autism Edmonton staff/ Board members can sort through and **recruit interested and capable volunteers** (and professionals) to develop a sound strategic plan that can be implemented. Use the information below (skills, experience and knowledge) to post in the "Volunteer" area of the website to look for ideal members to form the IT group.

6. A **working group of (at least) 8+ people should initially sit on the IT group/ committee** and meet (initially) 2x per month for 2+ hour meetings (evenings starting at 6:00pm) with dinner provided. This approach will create momentum and sustain interest, and weed out those who are not a "fit". The longer and more intensely a group works together, the more likely the group can "gel" and succeed.
    a. An **agenda** should always be provided a week in advance, and **minutes** should be taken by an Autism Edmonton employee (via laptop), then distributed along with the next agenda so that busy professionals have time to review the minutes and understand what will be discussed at every meeting. **It is KEY to have the highest standards of group organization and conduct of meetings when working with IT professionals** (i.e. "Robert's Rules of Order") because IT folks tend to remain interested and focused when there is clear direction and a purpose to their involvement **(their time is valuable and should not be wasted)**. This approach also permeates into the healthcare field.
    b. As the group size increases, it can break out into micro-groups during meetings that focus on particular areas to be addressed. **Use a "talking stick/ timer" approach (i.e. the Lean Coffee method) to encourage everyone to contribute meaningfully in a non-agenda type atmosphere,** using a timer and sticky notes to discuss items on the main IT group's agenda, while being efficient with limited timeframes.
    c. Once the project gains momentum (after a clear plan with deliverables is established) and once the key objectives are being accomplished (ie: decisions are made and agreed upon regarding what "systems" - actionable items - would fit best for Autism Edmonton), then working group/ advisory meetings can be reduced to a minimum of once per month, because they will need to report activities and statistics to the Board, and continue to adapt and update their IT, as needed.

Members of the IT group would ideally possess (collectively) most of the following expertise, skills, knowledge and experience (and of course, it would be obvious to start by canvassing high-functioning ASD members who are in technical programs/ university training, along with the institutions themselves – a perfect fit):

- IT Systems Management and/or Leadership experience.
- Project, Innovation and/or Strategic Planning background (who can break the big picture or the organization's overall needs/ plan into bite-size achievable steps and monitor progress using GANTT charts or other tools to report to the board).
- Financial/ Budgeting Management experience, knowledge, and skills
- Hardware and Server Administration experience and skills.
- Data Security and Controls (including legal landscape knowledge/ organizational audits)
- Database Design and MIS (Management Information Systems) Experience
- Programming/ Software Development skills and knowledge (HTML5, CSS3, JavaScript, C++, SQL, etc.), data storage mechanisms, email systems, bulletin boards.
- Website design/ presentation experience (Drupal skills for existing site).
- Project and/or application development experience (i.e. Waterfall and Agile methods)
- Data and statistical analysis experience and knowledge.
- E-Commerce and Revenue Modelling experience and knowledge.
- User Experience (UX) knowledge.
- Marketing and Communications experience (in writing e-marketing plans and strategies, working with social media, inbound/ outbound marketing, public relations, member management, etc.).
- Volunteer organization, management and recruitment experience.

Additional Comments

Following the assembly of an IT group and outline of actionable items, below are more areas that deserve serious consideration and research when designing new strategies, choosing new IT systems, performing website design, managing membership, and communicating/ marketing.

Social Networks and Communities

Autism Edmonton is built upon a community of people affected by Autism Spectrum Disorder, in other words, they are a social network. The social network is key[1] because:

- The financial future of social networks hinges on becoming advertising and sales platforms. Without resources to sufficiently maintain a social network, it may fade out. Traditional revenue models of competing for grants, donations, and philanthropic contributions involve a lot of research, marketing and manpower. There are now other ways to obtain revenues that help grow non-profits/ social networks through the use of IT (described below).

- Social networks (Facebook) are not yet proven platforms that drive membership or sales. Response rates to display ads on Facebook are far lower than on portal sites like Yahoo, or search ads like Google.

- In part, this reflects the sentiment of users who go onto social sites without the intention of purchasing anything. Many users are focused on finding information quickly, then leave the social site if there is no "social activity" happening.

Social Network Features & Technologies Possible
(i.e. "Connecting Autism" Facebook group activities that could integrate with a membership management system)

FEATURE	DESCRIPTION
Profiles	User-created Web pages that describe themselves in a variety of dimensions
Friends	Ability to create a linked group of friends
Network discovery	Ability to find other networks and find new groups and friends
Favorites	Ability to communicate favorite sites, bookmarks, content, and destinations
Games, widgets, and apps	Apps and games on the site, such as those offered by Facebook
E-mail	Ability to send e-mail within the social network site to friend
Storage	Storage space for network members' content
Instant messaging	Immediate one-to-one or one-to-group contact with friends through the community facility
Message boards	Posting of messaged to groups of friends and other groups' members
Online polling	Polling of member opinion
Chat	Online immediate group discussion; Internet relay chat (IRC)
Discussion groups	Discussion groups and forums organized by topic
Experts online	Certified experts in selected areas respond to queries
Membership management tools	Ability of site managers to edit content, and dialog; remove objectionable material; protect security and privacy

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[1] *Electronic Commerce for Managers*. Pearson Learning Solutions, 2014-04-01. VitalBook file.

Portals

Autism Edmonton could position itself online as a "portal". Also, since so much activity is based on providing help to their members affected by ASD, Autism Edmonton could employ an approach of building community by using the "**helper theory**" or the "helper therapy principle" as a model. This terminology was first coined in 1965 by Frank Riessman, attempting to explain **the therapeutic effect for both people in a "helper" and "helpee" relationship** within self-help/ mutual-aid support groups. According to the model, **in the process of helping another member, the helper gains an increased sense self-efficacy making the relationship mutually beneficial**. Members in a self-help/ mutual-aid group found that being in both helper and helpee roles correlated positively with their psychological wellbeing and perceived benefit of the group. Such members had a greater sense of well-being and a more favorable opinion of the group than members who were helpees only.

The most commonly-known portal is Yahoo!!, which integrates "feeds" from other websites and sources. Websites can be programmed to provide up-to-date information from other websites (with expressed owner permission). There is a reason why portals are popular and useful[2]:

- The **concentration of audience share in the portal market reflects (in addition to network effects) the limited time budget of consumers.** This limited time budget works to the advantage of focused and general-purpose portals.
- **Consumers have a finite amount of time to spend on the Web**, and as a result, most consumers visit fewer than 30 unique domains each month. Facing limited time**, consumers concentrate their visits at sites that can satisfy a broad range of interests,** from weather and travel information, to stocks, sports, and entertainment content.
- General-purpose sites such as Yahoo try to be all things to all people and attract a broad audience with both generalized navigation services and in-depth content and community efforts. For instance, Yahoo has become the Web's largest source of news: more people visit Yahoo News than any other news site including online newspapers.
- Yet, recent changes in consumer behavior on the Web show that **consumers are spending less time "surfing the Web" and on general browsing, and more time doing focused searches, research, and participating in social networks**. (This is where Autism Edmonton would focus on a niche market – those affected by ASD)

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[2] *Electronic Commerce for Managers*. Pearson Learning Solutions, 2014-04-01. VitalBook file.

- These trends will **advantage special-purpose, vertical market sites that can provide focused, in-depth community and content.**

Thus, to develop the Autism Edmonton community and provide help more efficiently and cost-effectively, there needs to be a **central interface/ portal whereby all members can access the majority of information and tools available across the organization in one place (or web page)**.

For example, rather than being told by a staff member that a Facebook group exists (i.e. Connecting Autism Professionals/ Parents), the links to those groups would be at the portal or main page of the website. Thus it is more user friendly and easier to navigate the system, especially for people with special needs or limited time. This allows the community to grow faster, rather than be treated as a "secret club". The Internet was created for the expressed intent of sharing knowledge and resources, with the use of security controls. This view is still important today when offering resources that social networks rely on, making groups more inclusive and open. Therefore, have links to everything at the main page/ portal, then link out to the resources and information in a logically-structured and easy to search format. Develop a better site plan.

Organization File Management/ Resource Library

Using Microsoft Explorer to store Autism Edmonton's documents and information can be difficult and risky long-term. For staff, it is not as intuitive and easy to store/ tag/ find important documents/ items as other tools now available. Also, if the main server is compromised, so are Autism Edmonton's data and documents. It also involves regular "updates" and "backup" systems, which take time and effort of people.

Furthermore, security of such a system can be an issue. It's no secret that Microsoft products are targeted by viruses, hackers, and their privacy of data is not always kept private. This is why many established corporations use an "intranet" to access company documents and information, and tend to avoid Microsoft products, which must be regularly "renewed". Try Open Office programs that are free and open source.

One tool I can recommend for a knowledge library and data storage, and I use personally, is **Evernote** (https://evernote.com/business/). It's a powerful tool that can be accessed remotely, including from mobile devices. Take a look at it and see why it is so powerful, especially in today's mobile society. Many large and forward-thinking organizations use Evernote.

Content Management Systems (CMS)[3] and Customer Relationship Management (CRM) Systems

More individuals and organizations are moving quickly to adopt CMS technologies. Industry participants and scholars promote using CMS products to bring benefits to businesses and organizations. Benefits can include: a reduced strain on Web and IT staff, more efficient staff utilization, streamlined Web maintenance processes, metadata and taxonomy capabilities, the ability to more efficiently and affordably create and manage Web content, repurpose and reuse content, deliver timely, targeted and accessible content, improve content value, reduce ongoing operational costs and realize rapid ROI.[4] As for potential revenues, while budgets for marketing and sales technologies may be decreasing in some industry sectors, less-resourced companies have found a vast market of lightweight, inexpensive CMS products in response to lean economic times and smaller teams' needs.[5]

I recommend using **ShoutCMS** (http://www.shoutcms.com/) to power Autism Edmonton's website, its content, membership and marketing activities. ShoutCMS is a powerful web platform tool that was developed by a local website design company, Mediashaker, and now is offered globally.

Founded in 1998, Mediashaker designs and implements advanced web solutions through its products, communication expertise and web-publishing services. Having a portfolio of over 600 clients, its mission is to *"Simplify Technology & Make it Fun".* Mediashaker's main services include website design, internet marketing, e-commerce, graphics and writing services. Using a full-service agency means less running around. It also saves on the cost of employing staff, who may not have the expertise or tools to complete important activities. If Autism Edmonton requires any branding or marketing assistance, Mediashaker can do it. They are also well-respected in the non-profit sector.

ShoutCMS offers clients a suite of tools to do web publishing, content management, mass e-mailing, and e-commerce. Clients have the freedom and ability to easily manage their own websites and customers, in real-time.

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[3] See: Paul Boag, *"10 Things To Consider When Choosing The Perfect CMS",* Smashing Magazine, May 5, 2009, found at: https://www.smashingmagazine.com/2009/03/10-things-to-consider-when-choosing-the-perfect-cms/. A **content management system** (**CMS**) is described as "a computer application that allows publishing, editing, modifying, organizing, deleting, and maintaining content from a central interface".

[4] See the white paper by Todd Peters, *"What You DON'T Know About Web Content Management"* Found at: http://www.westminster-mo.edu/academics/assessment/Documents/BestPracticeinEnterpriseContentManagement.pdf

[5] HubSpot's "**State of Inbound 2015**" report. p 56. Downloadable at: http://www.hubspot.com/.

Currently, Autism Edmonton uses "Drupal", an open-source product (where the programming source code is not private, but "open", making websites susceptible to security issues and easily breaking). At OpenSourceCMS[6], market data can be found on open-source CMS software. WordPress.com[7], Joomla[8] and Drupal[9] are the most used open-source CMS products,[10] with millions of users (because they are free). But they do not always integrate well with other tools, and plug-ins can be costly/ time consuming to deploy.

ShoutCMS is not open-source, but brands that are considered a direct competitor to the ShoutCMS product include vendors such as Wix[11], Squarespace[12], Shopify[13], Weebly[14] and WordPress.org.[15]

ShoutCMS carries more product features than its competition, including **an all-in-one fully-featured system, including security measures and controls, with pushed automatic updates.** It allows users to set different pricing, product, service, categorical and contact levels. It has B2B (business-to-business) **intranet** capability. It works seamlessly with (approved) products such as MailChimp.

ShoutCMS has already been tested, refined, and works well with larger-scale CRM and CMS needs. It also uses WHMCS[16] to manage e-commerce orders. ShoutCMS is more secure because the product does not incorporate numerous add-ons, reducing security and data breach risks (which their competition and free open-source products have struggled with). It is professionally managed through the use of excellent server administration controls and back-up systems, giving clients peace-of-mind.

Compared to other CMS systems out there, ShoutCMS is marketed as the first **"web design tool built specifically for business communicators"**, and relative to Wix, WordPress, and Weebly (which are mainly website builders and less of a CMS), ShoutCMS offers so much more.

Mediashaker's ShoutCMS product is a customer relationship management (CRM) tool and a content management system (CMS). There are many reasons to consider ShoutCMS to meet Autism

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[6] See: http://www.opensourcecms.com/
[7] See: https://wordpress.com/
[8] See: https://www.joomla.com/
[9] See: https://www.drupal.org/
[10] See: http://www.opensourcecms.com/general/cms-marketshare.php where, based on tracking 20,000 people who have installed an add-on to track estimated usage, with estimated rates at 2,163,473 users (WordPress), 360,177 users (Joomla), and 234,907 users (Drupal).
[11] See: http://www.wix.com/
[12] See: http://www.squarespace.com/
[13] See: https://www.shopify.ca/
[14] See: http://www.weebly.com/
[15] See: https://wordpress.org/. The open-source self-hosting version, allowing for purchase of "features" and additional functionality.
[16] See: https://www.whmcs.com/ . WHMCS is the world's leading web hosting billing and automation platform.

Edmonton's IT needs (see: http://www.mediashaker.com/content-management-systems). The most important reason is that the Autism Edmonton website and email can be hosted in a colocation facility in Canada, rather than opening the website to security issues that exist in other jurisdictions (i.e. one concern many professionals would have in using a web developer located in another jurisdiction is that when he accesses the site from the Philippines, there are huge security, privacy and data breach risks). Websites hosted in Canada are among the safest in the world because of the *Personal Information Protection and Electronic Documents Act* (PIPEDA), which regulates the protection of sensitive and personal information for both individuals and businesses.

Mediashaker is well-versed and experienced in developing tools that are "membership based", working heavily with unions, associations, and non-profits (see: http://www.mediashaker.com/Not-For-Profit-Websites). Examples of organizations already using Mediashaker and ShoutCMS to power their IT infrastructure and online communities include:

Alberta Bicycle Association

Alberta Continuing Care Association (ACCA)

Alberta Federation of Agriculture

Alberta Genealogical Society

Alberta Triathlon Association

Alberta Weekly Newspapers Association

Bricklayers and Allied Craftworkers Edmonton (BAC)

Canadian Home Builders Association

Child Adolescent and Family Mental Health (CASA)

Creative Edge Edmonton

Crestwood Skating Club

Edmonton Ironworkers Union Local 720

Edmonton Seniors Coordinating Council

Ever Active Schools

International Union of Operating Engineers Local No. 955

Paul Kane High School Student's Union

Sport Medicine Council of Alberta (SMCA)

Technology Alberta

The Kids Kottage Foundation

e-Marketing

Inbound marketing for Autism Edmonton should be the number one goal.[17] Inbound works across business-to-business (B2B), business-to-consumer (B2C), and non-profit sectors.[18]

The components of inbound marketing are **content** (e.g., blogs, videos, eBooks, white paper PDF files), **social networks** (e.g., Twitter, Facebook, blogs), and **search engine optimization** techniques, to help get the social media or website to come up on the first page of results for a keyword search.[19]

Inbound marketing **prioritizes compelling content over ads**, by pulling customers (members) to you rather than pushing your message onto them. Small-to-Medium Businesses more often use inbound.[20] Regionally, inbound marketing is 3x as popular as outbound worldwide, as 77% of marketers used inbound in North America in 2015[21].

The main take-away here: save your organization money when it comes to "advertising" and "outbound marketing". Rather, invest in public relations and building a solid online community.

Metrics

This section describes the appropriate performance metrics[22] that can be used to evaluate goals and marketing activities for Autism Edmonton. The only way to know whether Autism Edmonton is reaching its objectives is to measure its results. Doing so involves setting up tracking systems to measure results and to evaluate any strategic and/or marketing plan's success on a continuous basis.

It is essential to include feedback mechanisms to assess the plan's success and make necessary course corrections along the way, especially in a fast-paced e-business environment. In fact, some marketers recommend contingency plans and "trigger points" that if reached will invoke strategy refinement.[23]

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[17] See Strauss, Judy and Frost, Raymond. *E-Marketing, 6th Edition.* Pearson Learning Solutions. June 2011. p 16**. Inbound marketing** is the practice of getting found online, as opposed to interrupting customers with outbound marketing (traditional media advertising, e-mail blasts, telephone calls, tradeshows, newsletters, etc.)

[18] See HubSpot, above, p 18.

[19] See Strauss, above, p 16.

[20] **See HubSpot above**, p 26. Companies are three times as likely to see higher ROI on inbound marketing campaigns, than on outbound marketing campaigns. The best organizations know that paid advertising won't drive success. Companies with the highest return on their marketing dollars are resisting the allure of paid campaigns, recognizing outbound as being overrated.

[21] See HubSpot above, p 41.

[22] See Strauss, above, p 38. Performance metrics, also called key performance indicators (KPI), are specific measures designed to evaluate the effectiveness and efficiency of an organization's operations, both online and offline. Armed with this information, the company can make tactical corrections to make sure it accomplishes their goals.

[23] See Strauss, above, p 51.

The best marketers check their marketing analytics **3+ times per week**[24] and are over 20% likely to achieve positive ROI. Best-in-class marketers **track ROI**, prove it's growing each year, and secure increased budget as a result.[25]

A **daily reporting mechanism** could be used to diligently monitor and analyze each web location that Autism Edmonton places promotional and marketing materials (such as YouTube, blogs, Pinterest, Google+, Facebook, LinkedIn, Twitter, etc.) and measures could also involve having a staff member delete inappropriate comments (if possible) or respond to inappropriate material in a client-oriented manner.

For instance, the "**voice of the customer**" is "a systematic approach for incorporating the needs of customers into the design of customer experiences".[26] **InMoment** is one company that offers such a tool to do so through their "Listen" software.[27] Where one negative review is found online regarding Autism Edmonton (there is one on Google), staff can then respond accordingly, if necessary.

"Listen" is a type of tool that can be part of a "**Balanced Scorecard**" approach,[28] carefully monitoring Autism Edmonton's performance metrics in four areas: **customer, internal, learning and growth, and financial.**

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[24] See HubSpot, above, p 24.

[25] See HubSpot, above, p 30.

[26] See Strauss, above, p 17. According to Brude Temkin at Forrester Research, voice of the customer tracking outlines five components: relationship tracking, interaction monitoring, continuous listening, project infusion (including customer insights in strategies and tactics), and periodic immersion (by employees with customer interactions). Companies are buzzing about this new technique for capturing a 360° view of customer preferences and behavior in every online and offline channel.

[27] See: http://www.inmoment.com/products/experience-hub/#listen. InMoment's Listen software captures customer feedback and engagement **from sales receipts, invited surveys, Web site metrics, voice comments left by customers, and through other channels.**

[28] See Strauss, above, pp 40-41 and www.balancedscorecard.org. Developed by two Harvard Business School professors in 1990, the **Balanced Scorecard** has a huge adoption rate. The scorecard **approach links strategy to measurement by asking companies to consider their vision, critical success factors for accomplishing it, and subsequent performance metrics in four areas: customer, internal, learning and growth, and financial.** The **customer perspective** uses measures of the value delivered to customers, in four general areas: time, quality, performance and service, and cost. They also include measures such as time from order to delivery, customer satisfaction levels with product performance, amount of sales from new products, and industry-specific metrics such number of service calls. The **internal perspective** evaluates a company's success at meeting customer expectations through its internal processes, including employee skills and productivity. In the **learning and growth perspective**, companies place value on continuous improvement to existing products and services as well as on innovation in new products. Measures include the penetration of new markets, and the improvement of processes such as CRM or SCM initiatives. If the projected outcomes result from the previous perspectives and performance metrics, the financial perspective will be on target too. **Financial measures** include income and expense metrics as well as return on investment, sales, and market share growth.

Whatever tools are chosen, they should provide **web analytics**[29] to collect data from **web site server logs**[30], **cookie files**[31], and **page tags**[32]. Tracking conversion and click-through rates is key, and a target should be set.

One example could be to focus on increasing membership by 1000+ new members in an eight-month period. So, if the **conversion rate was set at a 3% goal,** then it could take approximately **140 daily website hits** to reach a goal of 1000+ new members in 8 months (i.e. *1000+ new members over 8 months = 125 new members per month/ 30 days = just over 4 members per day, at a 3% conversion rate = approximately 140 unique site visitors per day*).

Also, the key with financial metrics is to track ROI in order to prove ROI and justify a budget increase. No ROI tracking, no demonstrable ROI. **No ROI, no budget**.[33]

Mobile Computing

The rapid growth of wireless access points, when coupled with the large number of individuals' worldwide owning cell phones and the huge numbers owning smartphones or notebook computers, indicates a continuing growth in wireless networking. As this trend plays out, **customers will demand information, entertainment, and communication whenever and however they desire and in small file sizes for fast downloading**.[34]

One major problem I see with providing the "Next Steps" resource through downloadable PDFs is that users must download the PDF on their mobile device, wherein if they do choose to download (which can affect mobile device data usage limits), they will quickly find that the PDF itself is not mobile

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[29] See Strauss, above, p 38. **Web analytics** is the study of user behavior on Web pages. Commonly collected metrics include which tactics generated the site traffic, which pages are viewed most, how many comments were posted on a blog, and how many fans there are on a company Facebook page. A key metric involves **conversions to sales or other desired behaviors**, such as registering at the site.

[30] See Strauss, above, p 39. **Web site server logs** record the user's IP address, which browser the visitor is using, his or her location before arriving at the company site, the time of the day, and every user click through the site. IP addresses tell us where users live.

[31] See Strauss, above, p 39. **Cookie files** are small data files written to a user's hard drive when visiting a site. They are necessary for using shopping carts and other operations at a site. When customers return, the cookie file data are retrieved and used to understand how many visitors are returning. Amazon.com uses cookie file data to display the user name on its home page instantaneously.

[32] See Strauss, above, p 39. **Page tags** are one pixel on a page that is invisible to users and activate a special script when users are on the page, providing information such as when items are removed from a shopping cart. Tags can also be activated based on cookie files on the visitor's hard drive from a previous visit—creating data about the return visit and what the user did.

[33] See HubSpot above, p 16.

[34] See Strauss, above, p 21.

friendly (meaning readable, easy to click through, etc). Also, having such types of outbound links provided in this manner cannot be monitored through a metrics analytics system.

Furthermore, the PDF itself is created by using "Microsoft PowerPoint", which is not only unsuitable for creating documents with numerous links, but it requires a lot of "finessing and formatting" to make the pages look, at best, readable. For instance, the text placed on PowerPoint slides shrinks as more text is provided, which creates an inconsistent/ unprofessional look.

This method of providing links should be done on an actual webpage, which is html-friendly, and if Autism Edmonton chooses to use a suitable CMS system (such as ShoutCMS), the staff could quickly provide those links themselves, rather than updating a "master document" and then waiting for a "techie" to do updates or load PDFs. As well, link-checking software can be quickly run across a website to find broken links, much faster than a human ever could.

Navigation Systems

There is a great movement towards offering "customized" self-service information through the "guided pathways" approach. A number of industries, notably education and justice, have found that this model can serve the public well, while cutting costs and maximizing service delivery.

For example, if someone in Alberta wants legal advice on family law matters, they can now go to www.legalave.ca and the system will take the user through a series of questions which branch off into sub-topics and knowledge domains, eventually towards an answer or actionable item the user can take. This saves people A LOT of time. LegalAve cost $992,500.00 to develop, and received funding from the Alberta Law Foundation. Beginning as a group of 200+ stakeholders, they determined there had to be a better way to serve the public, as so many people find it difficult to navigate the legal system. Numerous agencies spend their limited resources helping people "bounce around" from one service provider to another, while the user never really gets their needs met. Take a look at the resource owners of LegalAve to see those with a vested interest in helping families access justice. This can serve as a starting point to develop partnerships that have both resources and human capital to assist Autism Edmonton. (The BC Civil Resolution Tribunal (CRT) is another example.)

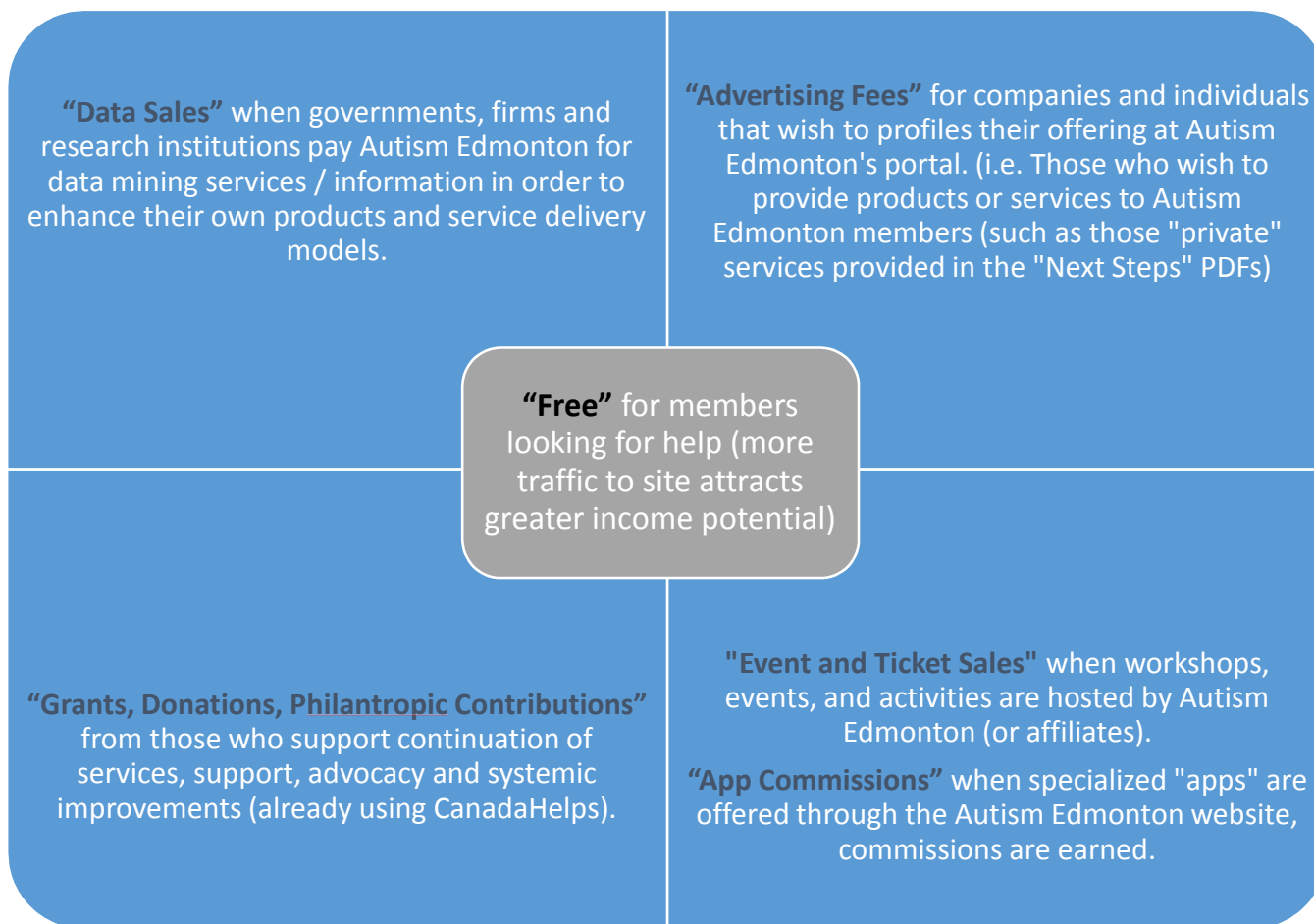While navigating the healthcare "system" can be complex, we can now link unlimited websites together that can serve interest groups and the public. This would work well for those who navigate ASD services. However, it does take a larger team to manage the project and costs to hire technical specialists to get the "programming" done on the website. This is where the "Next Steps" guides should eventually progress towards.

Financial and Human Capital

Relying on grants and donations is one way to support Autism Edmonton, however, in the online (e-business) world, there are other innovative ways that not-for-profits can increase revenues.

Part of having an IT group is to research actual methods to increase revenues. Using IT to automate the capture of various types of revenues can be advantageous. It is important to also consider anyone's ideas on financial modelling with an open mind, as this is where innovation sprouts and organizations have been known to grow and create valuable relationships with stakeholders.

Possible Revenue Models

"Data Sales" when governments, firms and research institutions pay Autism Edmonton for data mining services / information in order to enhance their own products and service delivery models.

"Advertising Fees" for companies and individuals that wish to profiles their offering at Autism Edmonton's portal. (i.e. Those who wish to provide products or services to Autism Edmonton members (such as those "private" services provided in the "Next Steps" PDFs)

"Free" for members looking for help (more traffic to site attracts greater income potential)

"Grants, Donations, Philantropic Contributions" from those who support continuation of services, support, advocacy and systemic improvements (already using CanadaHelps).

"Event and Ticket Sales" when workshops, events, and activities are hosted by Autism Edmonton (or affiliates).

"App Commissions" when specialized "apps" are offered through the Autism Edmonton website, commissions are earned.

Additional methods that can be used to generate revenues and human capital are crowdsourcing (finding people) and crowdfunding (using the power of crowds to gather money to support a project or cause).