



NAUTILUS BUSINESS PLAN

AAAS * HHMI * SIMONS





The background of the slide is a light gray gradient with several realistic water droplets of various sizes scattered across it. The droplets have highlights and shadows, giving them a three-dimensional appearance. They are located in the top left, top center, and bottom right areas of the slide.

A UNIQUE OPPORTUNITY

FONES CONSULTING

JUNE 19, 2017

UNIQUE OPPORTUNITY

- The **unique editorial positioning** of Nautilus provides an opportunity to develop a business without direct competitors and tap into a broader audience than the mainstream science magazines.
- The ability to capture the interest and dollars from institutional partners has allowed Nautilus to develop **unique revenue streams** that are not based on traditional CPM or other strict audience measurements. Nautilus is not playing by the “normal” rules of print and digital advertising. This provides an opportunity to drive revenues that far exceed its measurements by traditional terms.
- The **unique and appealing design** of the print product, coupled with the same for the web has created an environment that both consumers and businesses want to be a part of. With the right marketing resources and efforts, there is significant opportunity for circulation growth.

UNIQUE OPPORTUNITY

- A **partnership with AAAS provides** a strong base of customers that can create very efficient customer acquisition while providing AAAS with a publication that helps to broaden its product offering to new and existing members.

- There has been **no full-time, dedicated marketing resource** since the magazine was launched responsible for growing circulation and driving subscription revenue. As a way to defer costs, a partnership with MIT Press was formed and this proved very disappointing in terms of both their efforts and lack of expertise.

UNIQUE OPPORTUNITY

- There is **opportunity for more natural/organic growth in Circulation.** With limited retail presence, no direct mail or other visible forms of promotion, there has been limited exposure of the brand. Many consumers are not even aware that the product exists.

SIGNS OF STRENGTH

- Growth in e-commerce – Store orders up 60% over the prior year with no marketing team and no marketing investment. Strong conversion of web traffic to paid subscribers.
- Growth in Web Traffic – up 17% over the prior year with no investment in driving traffic
- Development of a new revenue stream through Channel Custom Publishing – the creation of 8 paid Channels in 2017
- Increase in Social Media following ...
 - facebook = 126,484 likes
 - twitter = 53,400 followers
 - Instagram = 7,810 followers

CHALLENGES

- Short term cash and financial constraints resulting in potential damage to reputation within the science editorial community
- Product format does not lend itself well to retail sales
- All channel custom publishing and sponsorships sold by only one person with key relationships – limited bandwidth up to a point
- Limited renewal data on print and digital customers based on limitations of current e-commerce system
- Large investment in editorial and design resources needed to feed issues, ongoing web content and channels. Needs to be examined if it can be done more efficiently without sacrificing quality.

5 YEAR BUSINESS PLAN

	2016	2017	2018	2019	2020
Revenue	\$1,899	\$1,720	\$2,465	\$3,173	\$3,995
Expense	\$2,829	\$2,652	\$3,151	\$3,359	\$3,575
Margin	(\$930)	(\$933)	(\$686)	(\$186)	\$420
Cum. Margin		(\$1,862)	(\$2,549)	(\$2,734)	(\$2,314)

All \$ on (000)

Assumes no Grants from 2018 forward

CURRENT ACCOUNTS PAYABLE

As of June 19, 2017

	Current	1-30	31-60	61-90	>90	Total
	\$27,041	\$9,854	\$46,002	\$50,768	\$317,683	\$451,349

Brown University is largest \$ amount of \$117,003 from Rent



OUTSTANDING LOANS

- TOTAL LOANS ARE \$1,093,268 PRIMARILY TO 2 INDIVIDUALS

SCIENCE MAGAZINES CIRCULATION

Publication	Circulation
NAUTILUS	19,788 *
ASTRONOMY	102,752
DISCOVER	393,929
POPULAR SCIENCE	1,084,294
SCIENCE NEWS	84,250
SCIENTIFIC AMERICAN	399,534
TECHNOLOGY REVIEW	171,733
SCIENCE	81,891 paid + 21,378 sponsored & non- paid = 103,269
NATURE	

Nautilus data – 6,813 Print and 12,975 Digital subs
Data for other titles from June 2016 Alliance for Audited Media
Science data from Will - BPA

WEB STORE AND E-COMMERCE



STORE & E-COMMERCE

Key assumptions in Plan

- Web traffic growth: +25% in 2018, +20% per year in 2019 and 2020
- Traffic growth YTD 2017 is 16.8% over 2016 - same time period
- Investment in traffic growth through Paid Search and site/content Optimization starting in mid-year 2017
- Hire outside digital marketing group – begin in July 2017
 - Site optimization
 - Paid search
 - Web subscription promotion ads
 - Email Marketing
 - Social Media Marketing
- Improved conversion and renewal rates through stronger email marketing
- Modest Increase built in for Average \$ Per Order – \$38.74 to \$42.00
- Utilization of credit card automatic renewal to significantly improve conversion & renewal rates
- Conversion of Store Visitors to improve from 10.02% to 15.0% in 2020



FINANCIAL PROJECTIONS E-COMMERCE

	2016	2017	2018	2019	2020
E-Commerce Revenue	\$320,190	\$502,884	\$838,656	\$1,056,707	\$1,358,623
Growth %		+57.0%	+66.7%	+26.0%	+28.9%
Marketing Expense	\$45,426	\$120,000	\$256,914	\$268,645	\$276,664
Margin	\$274,764	\$382,884	\$581,742	\$788,062	\$1,081,959

Growth assumptions are conservative here – significant upside

SALES BY PRODUCT

	2016 Sales Data	Ave. Price
Print Edition	3,577	\$45.20 for 1 year subscription
Prime Digital Edition	2,890	\$17.15
Lifetime Prime	245	\$99.00

Although all purchases were online, more customers are choosing the higher priced PRINT edition over the Digital edition. This is a unique product and the quality of the print edition combined with the type of content leads customers to want to hold it in their hands and enjoy the experience.

BACK ISSUES PROVIDE ADDITIONAL REVENUE SOURCE THROUGH STORE SALES



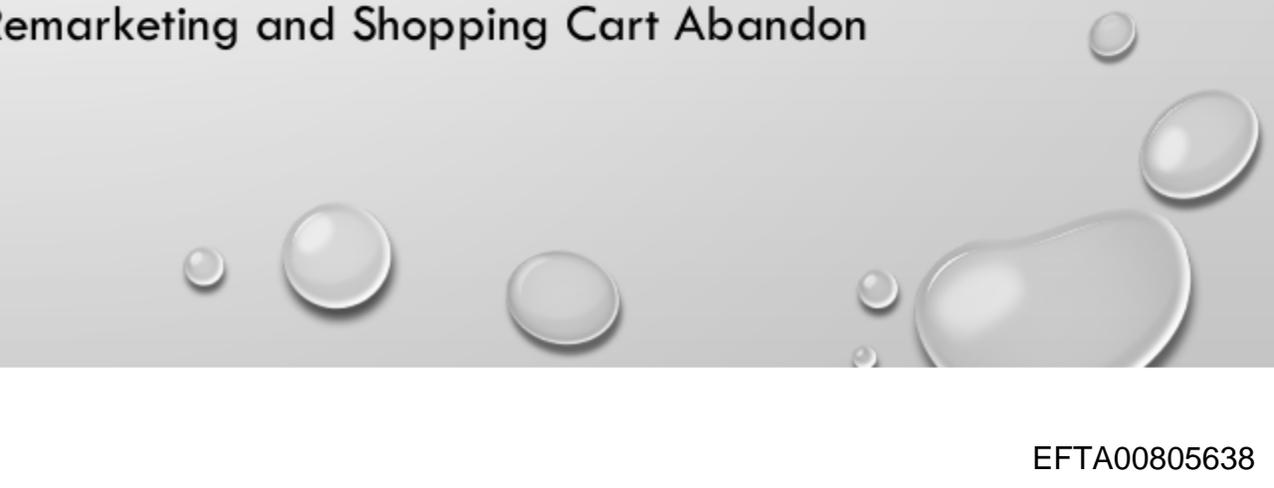
- Print issues have a long shelf life and customers are willing to pay high prices for individual back issues at \$12 per copy.
- In 2016, sold over 600 back issues at \$12.00 - \$19.00 each

WEB & E-COMMERCE OPPORTUNITIES

- Traffic growth has been primarily organic so opportunity to focus resources and expertise to increase organic as well as PPC traffic
- Currently the business does not have any one person dedicated to marketing and growing subscriptions. Hire mid-level marketing person in 2018
- The investment in marketing promotions to date has been minimal. The plan does not include any direct mail or printed material promotion which should at least be tested
- Experiencing strong natural growth in visitors to store and improved conversion to orders



WEB & E-COMMERCE OPPORTUNITIES

- No integrated marketing plan to capture email addresses from web visitors, nurture and convert to paid subscribers
 - Leveraging an external digital marketing group would help drive revenue growth while managing in-house marketing team expense
 - Increase and leverage social media following in a greater way with boosted posts and begin marketing test program
 - Opportunity to drive incremental sales through Remarketing and Shopping Cart Abandon programs
- 

WEB & E-COMMERCE OPPORTUNITIES

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE



- Access to the AAAS customer file will provide a significant advantage for acquiring customers cost-effectively:
 - AAAS active members
 - AAAS expires
 - AAAS email list of prospects – Registrations, ETOC, Careers, Other
 - Access to AAAS website to offer subscription ads
 - Opportunity to add Nautilus after sale of AAAS as bounce back or add-on promotion after purchase
 - Potential to test direct mail offer for Nautilus to AAAS audience
 - Subscription inserts for Nautilus in copies of Science
- Email promotion done in 2015 to AAAS lists generated over 2,000 new paid customers for Nautilus Prime @ discounted \$12 price point
- New AAAS email promotion being sent out soon to 3rd party list with new Nautilus offer.



OTHER MARKETING OPPORTUNITIES

- With a full time Marketing Manager on staff in 2018, there are numerous opportunities to create partnerships and to promote subscription offers for Nautilus.
- Gift promotions could be promoted much more aggressively to existing Nautilus print and digital subscribers as well as the AAAS audience. Nautilus makes a great holiday gift for that friend or family member that is a lover of science.
- Science museums, science competitions and science-related conferences all could be explored for subscription opportunities.

WEB & E-COMMERCE STATS – YTD

60% growth in Orders in 2017

	2017 YTD – 6/18	2016 YTD – 6/18	Variance
Website Users	3,345,451	2,863,670	+ 16.82%
Ave Monthly Users	608,264	520,667	
Visitors to Store	54,912	44,378	+23.7%
Conversion of Store Orders	10.02%	7.74%	+29.5%
Total Store Orders	5,503	3,435	+60.2%
Orders/Web Users	.164%	.120%	+36.66%
Ave. \$Rev Per Order	\$38.74	\$38.09	+ \$.65
Revenue \$	\$213,168	\$130,832	+62.9%

Orders include New and Renew Orders
 Traffic data from Google Analytics, store data from Big Commerce

WEB & E-COMMERCE STATS

	2016 actual	2017 Actual + Projected	2018 Projected	2019 Projected	2020 Projected
Unique Users	6,161,666	7,299,168	9,123,957	10,948,749	13,138,498
Ave Monthly Uniques	513,472	608,264	760,330	912,396	1,094,875
% Growth		+18.46%	+25%	+20%	+20%
Visitors to Store	96,287	129,561	149,760	179,712	215,654
Conversion %	8.86%	10.02%	14.0%	14.0%	15.0%
Total # of Orders	8,534	12,982	20,966	25,160	32,348
Orders as % of Uniques	.1385%	.177%	.229%	.229%	.2462%
Ave \$/ Order	\$37.52	\$38.74	\$40.00	\$42.00	\$42.00
Total \$ Revenue	\$320,190	\$502,884	\$838,656	\$1,056,707	\$1,358,623

WEB CONVERSION METRICS

	AAAS Science	Nautilus	Other Pub in Category	Current events/ politics
	Jan-May 2017	Jan-June 2017	2015 data	Jan-Aug 2015 data
Average Monthly Uniques	5,440,924	608,264	3,729,045	927,528
Conversion to Orders	.075%	.1645%	.0575%	.255%
Ave Monthly Orders	4,117	1,001	2,144	2,371

WEB AND E-COMMERCE CAPABILITIES NEEDED

- Can \$ be saved by hosting with AAAS?
- Need new commerce platform to allow for automatic renewal of subscriptions
- Need platform to capture email addresses in database and develop drip/nurture email campaigns to move prospects to paid buyers
- Need capability to execute Remarketing to website visitors
- Need capability to serve web ads and send emails as follow up to shopping cart abandons
- Site needs thorough review for search optimization



Current Email Newsletters

SELECT NEWSLETTERS AND SUBMIT CONTACT DETAILS...

•**New chapters** Thursdays

Nautilus publishes a new chapter of feature stories on its monthly theme, every Thursday. Sign up to this list to stay up to date on the latest and greatest.

•**Editor's picks** Sundays

Read about the Nautilus stories and blogs we've been thinking about over the past week.

Currently 35,000 emails sent 2X a week through Mail Chimp. With over 600,000 monthly uniques to the site, we should be able to grow the newsletter circulation.



NEWSLETTER OPPORTUNITY

- Opportunity to add topic specific newsletters that would allow us to tailor advertising and support certain channel content by building a following around a specific topic.

Social Media for Nautilus

Likes 126,484



Followers 7,810



Followers 53,400



OTHER COMMERCE OPPORTUNITIES

- Can we generate additional revenues from licensing content?
- Can we charge for specific webinars or podcasts?

NAUTILUS WEB USERS FROM AROUND THE WORLD

Top 5 are English speaking

1. UNITED STATES – 56.0%
2. UNITED KINGDOM – 6.36%
3. CANADA – 5.90%
4. INDIA – 3.13%
5. AUSTRALIA – 2.92%
6. GERMANY – 1.91%
7. BRAZIL – 1.12%



NAUTILUS WEB ACCESS BY DEVICE



DESKTOP

49.96%



MOBILE

41.09%



TABLET

8.96%



NAUTILUS ADVERTISING & CUSTOM PUBLISHING

- ✓ ADVERTISING SPONSORSHIPS
- ✓ ADVERTISING IN EMAIL NEWSLETTERS
- ✓ CHANNELS CUSTOM PUBLISHING

ADVERTISING SPONSORSHIPS

Sponsor	Content	2016
Howard Hughes	Spark of Science	\$93,000
Olin College of Engineering	2016 Aging Content	\$25,000
Glen Foundation		<u>\$110,000</u>
Total		\$228,300

ADVERTISING SPONSORSHIP REVENUE ASSUMPTIONS

	2017	2018	2019	2020
2017	\$50,000			
2018 - \$5K per month		\$60,000		
2019 - \$10K per month			\$120,000	
2020 - \$15K per month				\$180,000

John,
Add comment here

EMAIL NEWSLETTER ADS

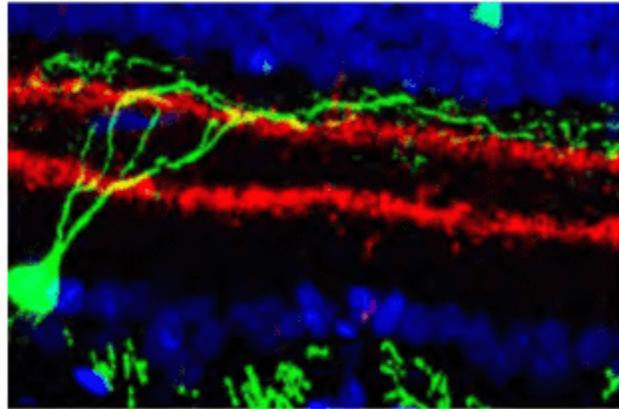
	2016	2017	2018	2019	2020
Lisa Mattress	\$6,000				
		\$12,000			
\$350/email X 2 emails per week			\$36,400	\$36,400	\$36,400

What is current size of email newsletter list?
Opportunity to drive more email subscribers.

Channels

TUNE IN TO NAUTILUS' DEEP DIVE PORTALS

SCIENCE PHILANTHROPY ALLIANCE



Creating a Census of Human Cells
by Aviv Regev

CANCER FOCUS



Why the Ethical Rules of Human-Subjects
Research Need a Fresh Look
by Matthew Sedacca

QUANTA ABSTRACTIONS



How Superfluid Dark Matter Mimics an Old
Idea About Gravity
by Jennifer Ouellette



NAUTILUS CHANNELS

- Channels give institutions the opportunity to create a custom publishing product on the Nautilus platform.
 - Including an online “magazine within a magazine”, print supplements, and potentially independent print magazine spin-offs.
- Content can be commissioned by Nautilus, or curated by Nautilus

NAUTILUS CHANNELS KEY ASSUMPTIONS

- Ability to scale channels from the current 8 channels to 22 over the next 3 years
- John Steele as primary/sole seller of Channels
- Organizations value the environment and audience that Nautilus has created beyond any strict measurements of impressions and # of web visitors.
- Continued ability to leverage the print edition as added-value to sponsorships and channel custom publishing
- Ability to leverage the Science Philanthropy Alliance and to lesser degree AAAS Affiliate Network

NAUTILUS CHANNELS REVENUE - 2016

SPONSOR	CONTENT	2016 REVENUE
Howard Hughes	Think Like a Scientist	\$100,000
John Templeton Foundation	COSMOS	\$184,217
John Templeton Foundation	COSMOS	<u>\$20,458</u>
Total 2016		\$304,585

NAUTILUS CHANNELS REVENUE - 2017

SPONSOR	CONTENT	2017 REVENUE
Howard Hughes	Think Like a Scientist	\$100,000
Howard Hughes	Spark of Science 2017	\$93,300
Glen Foundation	Aging	\$50,000 – 3mos 2017
Glen Foundation	Aging 2017	\$100,000
Glen Foundation	Printing	\$25,000
Amer. Society Clinical Oncology	Cancer Channel	\$60,000
John Hartford & AFAR	Aging Channel	\$60,000
Max Plank	In discussions	\$50,000 6 mos in 2017
Sloan Foundation	In discussions	\$50,000 6 mos in 2017
Woman in Science Engineering	In discussions	\$66,666 4 mos in 2017
Kavli Foundation	In discussions	\$33,333 – 4 mos in 2017
Other Prospects – Neuro Science	In discussions	<u>\$62,000 – 6 mos in 2017</u>
Total 2017		\$750,299

NAUTILUS ADVERTISING & CHANNELS

KEY OPPORTUNITIES

Channel	Institution	Content	
Quanta Abstractions	Simons	Blog reprints	
MIT Press	MIT Press	Curated Excerpts	
Nantucket project	Nantucket Project	Curated	
Science, Ethics and Religion	Templeton	Original	
Oceans	Dalio Foundation, WHOI	Original/Curated	
Chemistry	American Chemical Society	Original/Curated	
Invention	Lemelson Foundation	Original	
Economics	RAND	Original/Curated	
Exploratorium	Exploratorium	Curated	
Complexity	Santa Fe Institute	Original/Curated	
Carnegie Science	Carnegie Science	Curated	

CHANNEL REVENUE PROJECTIONS 2018-2020

	2017	2018	2019	2020
2017	\$750,2099			
2018 - 14 channels @ \$100k		\$1,400,000		
2019 – 18 channels @ \$100k			\$1,800,000	
2020 – 22 channels @ \$100k				\$2,200,000

EDIT RESOURCES FOR CHANNELS

	2017	2018	2019	2020
# Channel Editorial Interns	1	2	2	2
# Channel Editors - freelance	2	3	4	5
# Channels	8	14	18	22
# Channels Per Edit Resource	2.66	2.8	3.0	3.14
Channel Edit Costs	\$75,000	\$196,500	\$244,575	\$292,804

NAUTILUS ADVERTISING & CUSTOM PUBLISHING SUMMARY

	2016	2017	2018	2019	2020
Advertising & Sponsorships	\$234,300	\$62,000	\$96,400	\$156,400	\$216,400
Channel Custom Publishing	\$304,585	\$750,299	\$1,400,000	\$1,800,000	\$2,200,000
Total	\$538,885	\$812,299	\$1,496,400	\$1,956,400	\$2,416,400
% Growth		+50.7%	+84.2%	+30.7%	+23.5%



ADVERTISING & CHANNELS CHALLENGES AND OPPORTUNITIES

- Currently all advertising sponsorships and channel sales are driven by John Steele
 - How can we apply additional high-level resources to support the revenue growth plans?
 - \$100,000+ sales to Foundations and Institutions takes experienced and committed high-level resource.
How can AAAS help in this area?
- Will the credibility and stature of A.A.A.S. help with Channel sales?

NAUTILUS EDUCATION SUBSCRIPTIONS



- With 36,000 high schools in the USA, Nautilus is identifying the Institutions that want to support science and subsidize the cost to put Nautilus (print copy and digital access) into schools in a specific area.
- Moore Foundation has recently expressed interest in helping to fund the program.
- National Science Teachers Association has recently agreed to endorse and promote the project

High School Teachers tweeting on most important publications for their school.

David Theriault [@davidtedu](#)

Replying to [@secretrune](#)

I asked around. For HS teachers, in order 1. The New York Times 2. [@guardian](#) Major UK newspaper 3. The Atlantic Monthly 4. [@NautilusMag](#)

NAUTILUS EDUCATION SUBSCRIPTIONS

	2017	2018	2019	2020
# of Schools	625	1,250	2,000	3,500
Price per School	\$40	\$40	\$40	\$40
Revenue Estimate	\$25,000	\$50,000	\$80,000	\$140,000

NAUTILUS GRANTS SUMMARY

	2016	2017	2018	2019	2020
Templeton Foundation	\$1,025,000	\$300,000	\$0	\$0	\$0

NAUTILUS DONATIONS



	2016	2017	2018	2019	2020
Carnegie	\$10,000	\$0	\$0	\$0	\$0
Other	\$7,395	\$80,000	\$80,000	\$80,000	\$80,000
Total	\$17,395	\$80,000	\$80,000	\$80,000	\$80,000

Email and web solicitations for Donations to Support Science Journalism have generated \$40,919 to-date through June 21, 2017.



NAUTILUS

Stand Up for Science

Dear *Nautilus* Reader,

Here at *Nautilus*, we stand for science literacy and narratives. We trust our readers. Rather than reducing and dumbing down, we expand, connect, and educate. Today, this is more important than ever.

But we need your help to continue producing some of today's best science writing. [Please, donate today.](#)

And, this weekend only, every donation of \$50 or more will get a complimentary one-year subscription to our print magazine, with no added shipping costs—even for international addresses!

Best,

John Steele, Publisher

RETAIL SALES

- MIT was handling all retail sales through chains, bookstores and specialty stores
- Limited sales data is available
- Small size and current cover formula do not lend the magazine to strong retail sales.
- In addition, the crossover nature of the editorial makes it difficult for retailers to correctly place the magazine in the correct category – sciences/philosophy/thought leader/...



LIMITED RETAIL DATA SMALL DISTRIBUTORS, BOOK STORES

- Whole food and Barnes & Noble are two of the better know retail outlets that have carried Nautilus with mixed results in terms of % sale.
- A significant increase in retail copies (+3,500) is planned for the Sept/Oct 2017 and Nov/Dec issues in Barnes & Noble. The business plan assume that the retail draw goes back to lower levels starting in 2018.
- Given the declining efficiency and ongoing challenges of the retail magazine business, it is a positive for Nautilus to not be dependent on this channel for future growth and revenue.

EDITORIAL EXPENSE

	2016	2017	2018	2019	2020
# Full-Time Staff	10- 11	8	9	9	9
Intern – non Channel	?	1	1	1	1
Freelance Edit/Art/Misc	\$792,086	\$462,600	\$561,900	\$574,035	\$587,305
Staff w/ Benefits & Taxes	\$786,086	\$811,759	\$975,300	\$1,019,188	\$1,065,052
Total Edit Costs w/out Channels	\$1,578,173	\$1,274,359	\$1,537,200	\$1,593,223	\$1,652,357

PRODUCTION COST OF PRINT COPIES

	2016	2017	2018	2019	2020
Total Copies	62,959	92,888 *	110,050	139,800	173,800
Ave. Copies /Issue	10,493	14,315	18,342	23,300	28,967
Total Cost	\$165,262	\$204,555	\$236,608	\$293,580	\$364,980
Ave. Cost/Copy	\$2.62	\$2.20	\$2.15	\$2.10	\$2.10

* Includes 7,000 copies of COSMOS

CONCLUSIONS AND RECOMMENDATIONS

- Significant upside on growing subscriptions and e-commerce beyond what is in the plan
- Continued success and growth in the channel concept is critical but doable. As the circulation and audience grows, it will become an even more attractive platform for organizations to deliver their message.
- Editorial expenses need to be managed in line with revenues
- Applying the full and committed resources of AAAS is an important factor and should allow Nautilus to grow revenues and margin beyond what is in the plan.
- Content syndication or licensing could provide an additional revenue stream over time and the opportunity for a television or web streaming show is certainly a possibility.

CONCLUSIONS & RECOMMENDATIONS

A key element in reviewing this property is the fact that Nautilus is more than just a magazine. It really is a unique combination of the Print and digital offerings that are not static. The discussion continues well after the Print edition is published and well after customers get their weekly digital updates and new perspectives on the topic at hand.

The editorial positioning is unique and has the potential in today's world to have a much larger following as it spans across areas that are of interest to millions. The unique design and appealing environment are key attributes of the brand and reinforce the fact that this is something extraordinary. With thousands of publications and media options out there competing for people's time and attention, Nautilus stands out as something truly special.

There is not only a solid place for this brand and content but it can thrive and be held up as a case study for how to create a successful publishing business in today's fast-changing media environment.

Ed Fones