

High-level accessibility review – BTAA (NetAdvantage Platform)

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NetAdvantage Platform

Summary

Top 3 problems for the NetAdvantage Platform

This assessment covers portions of the NetAdvantage platform. The assessment revealed major problems with screen reader compatibility, resulting in screen reader users often missing critical information needed to understand content and operate features.

1. **Keyboard** – Many functions of the system are implemented as mouse-specific functions. Therefore, the functions and some content is completely unavailable to keyboard users.
2. **Name Role Value** – Many buttons, links and interactive functions are not semantically identified as the elements/functions that they behave like. Also, several elements do not programmatically communicate information that is visually communicated.
3. **Images** – Several images are either missing an alternate description or inappropriately use an empty alternative description, which inappropriately renders the important image as decorative. In some cases, the images (like graphs) communicate information vital to the system but this information is not available in an alternate method.

Accessibility findings

Project wide issues

The issues presented in this section were identified in multiple pages and are recorded here to avoid repetition. These are applicable to each screen. Due to particularities, similar issues are still reported on a page per page basis, where applicable.

Automated findings using Axe

Issues found through automated testing come from the Axe plugin, an open source accessibility testing tool that is available for Chrome, Firefox and Edge. Details here: <https://www.deque.com/products/axe/>.

1. **SC 1.4.3 AA** – The placeholder text in the search field in the page header has insufficient color contrast of 2.84 (foreground color: #999999, background color: #ffffff, font size: 9.0pt (12px), font weight: normal). Expected contrast ratio of 4.5:1
2. **SC 4.1.1 A** – The site contains multiple static elements with the same id attribute: addToListIFrame
3. **SC 3.1.1 A** – The <html> element does not have a lang attribute
4. **SC 4.1.2 A** – The ‘search submit’ button is missing an accessible name, aria-label or some other type of programmatic label/name.
5. **SC 1.3.1 A** – The ‘search term’ field is missing a programmatic label.
6. **SC 4.1.2 A** – The ‘NetAdvantage’ link in the header is missing a programmatic link name or label.
7. **SC 4.1.2 A** – A series of hotkey links (#_hotkey0 to #_hotkey9) are missing a programmatic link name or label.
8. **SC 2.4.1 A** – The page has no method for a user to bypass navigation and jump straight to content. A valid mechanism would include: a ‘skip to content’ link, semantic headings on the page, landmark regions.

Additional manual findings using NVDA screen reader

1. **SC 4.1.2 A** – In the header, the ‘Contact Us’ item does not programmatically indicate it has a submenu available.
2. **SC 4.1.2 A** – Within the ‘Contact Us’ submenu, all the links are missing an href attribute.
3. **SC 1.4.11 AA** – In the header, the top navigation items do not provide sufficient contrast for the visible focus indicator when the menu items receive focus.
4. **SC 1.1.1 A** – In the footer, the ‘S&P Global Market Intelligence’ image is missing an alternate

description.

5. **SC 4.1.2 A** – In the header, the current item in the top navigation is only visually indicated and not programmatically indicated.
6. **SC 4.1.2 A** – In the header, top navigation items with a submenu do not indicate that a submenu is present/
7. **SC 2.1.1 A** – In the header, a keyboard user is unable to activate any submenu options within the top navigation.
8. **SC 1.3.2 A** – In the top navigation, when a submenu is opened by a mouse user, the markup for the submenu is not placed in a logical code sequence, so the user must navigate backwards and outside of the top navigation in order to access the submenu items.
9. **SC 4.1.3 AA** – In the search function, when a listing of suggested search results appears, the listing is not announced.
10. **SC 2.1.1 A** – In the search function, a keyboard user is unable to access the “See all results for...” and “close” links.
11. **SC 4.1.2 A** – In the search function, a screen reader user is unable to accurately determine the actual name for each suggested search result.
12. **SC 2.1.1 A** – A keyboard user is unable to collapse the left-hand navigation menu.
13. **SC 4.1.2 A** – In the left-hand navigation menu, sections that can expand and collapse do not programmatically indicate the collapse /expand state. E.g. ‘My Capital IQ’
14. **SC 4.1.2 A** – In the left-hand navigation menu, buttons that can expand and collapse are missing required role and attributes. E.g. ‘My Capital IQ’

1. NetAdvantage Landing Page

Source: <https://www-capitaliq-com.proxy.wm.edu/CIQDotNet/my/dashboard.aspx>

Test case: Test initial interface/landing page to ensure menus, search box, images, icons, reading order, and charts are accessible. From the initial interface, perform a search for: Apple.

NetAdvantage Search Companies, People, Funds, and More... Contact Us | Print | Help | Logout

NetAdvantage > Companies | Research | Screening | Charting | Markets | Industry Survey | credit

Search Profiles
My Capital IQ
Comp Sets

Product Update | New Features
We've had a product release! Learn what's new for increased productivity, greater mobility, and deeper analysis.

Webinar | Coronavirus Insights: An Outlook on Corporate Credit Risk
Join us on August 26, as we explore the impact of COVID-19 on corporate credit risk for rated and unrated entities and look at the impact of macroeconomic factors on IFRS 9 impairment calculations. Register Here >

Welcome College of William & Mary Dashboard

Proprietary Data and Analysis from S&P Capital IQ

Commentary & Strategy

S&P 500 Earnings Report Week of 08/10/2020
Aug-11-2020 4:31 PM
This week, 11 members of the S&P 500 are expected to report quarterly earnings, including Cisco Systems Inc. and Sysco Corp.

Q2'20 M&A and Equity Offerings Market Report
Mantone, Joseph
Aug-11-2020 1:02 PM
S&P Global Market Intelligence discusses how the M&A market took steps toward a recovery in the second quarter, but notes that many more are needed before a pickup in activity full...

S&P 500 Earnings Report Week of 08/3/2020
Aug-04-2020 11:03 AM
Next week, 122 members of the S&P 500 are expected to report quarterly earnings, including CVS Health Corp. and AmeriSourceBergen Corp.

S&P 500 Earnings Report Week of 07/27/2020
Jul-27-2020 10:01 AM
During the week of July 27, 163 members of the S&P 500 are expected to report quarterly earnings, including Amazon.com Inc. and General Motors Co.

S&P 500 Earnings Report Week of 07/20/2020
Jul-20-2020 9:21 AM
Seventy-two members of the S&P 500 report quarterly earnings this week, including Microsoft Corp. and AT&T Inc.

S&P 500 Earnings Report Week of 07/13/2020
Jul-14-2020 9:03 AM
Twenty-six members of the S&P 500 report quarterly earnings this week, including JPMorgan Chase & Co., Citigroup Inc., Wells Fargo & Co. and Bank of America Corp.

S&P 500 Earnings Report Week of 07/6/2020

S&P Insights

The Analyst Matrix: Profiting from Sell-Side Analysts' Coverage Networks
Oyeniyi, Temi
Jul-29-2020 10:50 AM
• Connected-firm networks quantify the strength of relationships between companies in the network, unlike sector relationships which are binary. • The alpha signal constructed from...

Quantamental Research Brief: The Information Supply Chain Begins Recovering From COVID
Kolapaka, Pradeep Kumar
Jan-19-2020 10:25 AM
The COVID-19 shockwaves emanating through the global supply chain continue to reverberate. The information that decision makers have traditionally relied have also been disrupted b...

QUANTAMENTAL RESEARCH BRIEF - Never Waste a Crisis: Following the Smart Money through Beneficial Ownership Filings
Tortorello, Richard
May-28-2020 10:33 AM
Investors looking for ideas amid the recent market downturn may profit from an understanding of beneficial ownership filings. SEC schedules 13D and 13G. Large shareholders must fil...

QUANTAMENTAL RESEARCH BRIEF - Risky Business: Foot Traffic, Vacancy Rates, and Credit Risks
Oyeniyi, Temi
May-28-2020 10:30 AM
Foot traffic can be used by both lenders and investors as a proxy for business health - an increase in footfall may indicate business expansion, while a decline may suggest business...

QUANTAMENTAL RESEARCH BRIEF - Finding the Healthy Stocks in Health Care during Lockdown
Sandberg, Daniel J.
May-28-2020 10:27 AM
The COVID-19 pandemic has had myriad implications for companies around the world, including those within the Health Care sector. The Health Care sector has returned more than 9% s...

QUANTAMENTAL RESEARCH BRIEF - No Mass Walks To The Office? Bank Yields Foot Traffic Data

Government Debt Rates Open in Chart Builder | United States Treasury Constant Maturity - 10 Year and 1 More...

1m 3m 6m YTD 1y 3y 5y 10y Max | Aug-16-2019 - Aug-14-2020

Automated findings using Axe

- SC 1.4.3 AA** – All date and details lines from the ‘Proprietary Data and Analysis from S&P Capital IQ’ that have the light grey color has insufficient color contrast of 2.67 (foreground color: #9f9e9e, background color: #ffffff, font size: 7.5pt (10px), font weight: normal). Also, the same color against the zebra stripe background has insufficient color contrast of 2.45 (foreground color: #9f9e9e, background color: #f5f5f5, font size: 7.5pt (10px), font weight: normal). In both instances, the expected contrast ratio is 4.5:1.
- SC 1.4.3 AA** – The negative growth on the selected market in ‘Market Overview’ has insufficient color contrast of 3.65 (foreground color: #cc0000, background color: #c2cdd9, font size: 7.5pt (10px), font weight: normal). Expected contrast ratio of 4.5:1
- SC 1.4.3 AA** – All instances of positive growth in ‘Market Overview’ and ‘Stock Performance’ has insufficient color contrast of 3.77 (foreground color: #009900, background color: #ffffff, font size: 7.5pt (10px), font weight: normal). Also, the darker background has insufficient color contrast of 3.46 (foreground color: #009900, background color: #f5f5f5, font size: 7.5pt (10px), font weight: normal). Expected contrast ratio of 4.5:1.
- SC 1.4.3 AA** – All instances of ‘date’ text (Fri, Sat, Sun, Mon, etc.) in ‘Macroeconomic Events’ have insufficient contrast. #a0a0a0 foreground against #ffffff and #EAEAEA backgrounds result in 2.61:1 or 2.2:1 contrast ratio, where the expected ratio is 4.5:1.
- SC 1.4.3 AA** – In the ‘Market Overview’ section, unselected tabs have insufficient contrast. #ffffff foreground against #949494 results in 3:1 contrast ratio where the expected ratio is 4.5:1.
- SC 1.1.1 A** – Images are missing an alt attribute. An empty attribute would be required for a decorative image or an image that has its information described in an alternate, accessible format. A descriptive attribute would be required for an informative image that does not have its meaning communicated in another accessible method. The ‘collapse’ image to the left of ‘My Capital IQ’ and the chart in ‘Government Debt Rates’.
- SC 1.3.1 A** – The ‘Date from’ and ‘Date to’ fields in the “Government Debt Rates” section is missing a

programmatic label.

8. **SC 4.1.2 A** – The ‘Charting Builder’ links in the ‘Market Overview’ section is missing a programmatic link name or label.

Additional manual findings using NVDA screen reader

1. **SC 1.4.1 A** – Links in the product update section are not visually distinguished as links. E.g. “Learn what’s new”, “Register Here”
2. **SC 2.4.7 AA** – The tools/widgets in ‘Welcome College of William & Mary Dashboard’ do not receive a visible focus indicator when the elements receive keyboard focus.
3. **SC 4.1.2 A** – In the ‘Welcome College of William & Mary Dashboard’, the ‘Full screen’ and ‘Set as CIQ start page’ are missing a href attribute.
4. **SC 1.4.5 AA** – In the ‘Welcome College of William & Mary Dashboard’, the ‘Full screen’ and ‘Set as CIQ start page’ are implemented as images of text instead of real text.
5. **SC 4.1.2 A** – The ‘Take a Tour of the New Dashboard’ link is missing an href attribute.
6. **SC 2.1.1 A** – In all dashboard widgets, the ‘options’ menu is not keyboard accessible.
7. **SC 1.3.1 A** – The table in ‘Welcome College of William & Mary Dashboard’ is missing programmatic table headers.
8. **SC 2.1.1 A** – All dashboard widgets cannot be resized by a keyboard user.
9. **SC 4.1.2 A** – All dashboard widgets ‘options’ menus do not indicate that they contain a submenu.
10. **SC 4.1.2 A** – All links in all dashboard widgets ‘options’ submenus are missing an href attribute.
11. **SC 4.1.2 A** – The listing of tabs in ‘Market Overview’ behave like a tab panel but are missing required ARIA roles and attributes to be identified and behave as one.
12. **SC 1.4.1 A** – In ‘Market Overview’ and ‘Stock Performance’, color is being used to communicate an increase or decrease in values.
13. **SC 4.1.2 A** – In ‘Macroeconomic Events’, the currently selected date is not programmatically indicated.
14. **SC 1.4.3 AA** – In ‘Government debt rates’ the “Canada government debt” text is low in contrast.
15. **SC 1.4.11 AA** – In ‘Government debt rates’ the “Canada government debt” line graph foreground is low in contrast.
16. **SC 1.4.3 AA** – In ‘Government debt rates’ the red text is low in contrast (#FE1F1F on #FEFEFF results in 3.8:1 contrast)
17. **SC 1.1.1 A** – Toward the bottom of the page the ‘data provided by’ informative images are missing a descriptive alternative description. (“Ice”, “4CAST”, “S&P Global Ratings”)
18. **SC 1.4.10 AA** – When reflow rules are applied to the page; the content does not fit to a 320 px wide viewport.
19. **SC 1.4.5 AA** – The ‘Government Debt Rates’ and ‘Market Overview’ graph images contain content that is implemented as images of text instead of real text.
20. **SC 1.1.1 A** – The meaning behind the graph images in ‘Government Debt Rates’, ‘Market Overview’, ‘Stock Performance – Price’ column and ‘Stock Performance – Volume’ column is not described or communicated in an accessible manner.

2. NetAdvantage Search Profiles

Source: <https://www-capitaliq-com.proxy.wm.edu/CIQDotNet/Search/Search.aspx>

Test case: Test results page, including tabs for Profiles/Lists/Funds/Products, horizontal links underneath Profiles tab, and icons.

Result Name	Type	Features
Apple Inc. (NasdaqGS:AAPL)	Public Company (Operating)	
Apple, James L. (BayCom Corp)	Professional (Prior Board)	
Applebaum, Aaron (Appletec Ltd.)	Professional (Current Pro)	
Apple, Tom (Woodruff Communications, Inc.)	Professional (Current Pro)	
Apple	Public Fund (Operating)	
Apple, C. Chris (AMX, LLC)	Professional (Prior Pro)	
Apple, Richard D. (Ncontracts, LLC)	Professional (Prior Board)	
Applebaum, Lizbeth Nelle (Merrill Lynch Professional Clearing Corp.)	Professional (Prior Pro)	
Apple Corp.	Private Company (Operating Subsidiary)	
Apple, Angie (The Finit Group LLC)	Professional (Current Pro)	
Apple, Armin (AgriBank, FCB)	Professional (Prior Board)	
Apple, Ben (Verdeo Group, Inc.)	Professional (Current Board)	
Apple, Bill (Beers and Cutler PLLC.)	Professional (Current Pro)	
Apple, Bill (Apple Farm Service Inc.)	Professional (Current Pro)	
Apple, David F. (Archbrook Capital Management LLC)	Professional (Current Pro)	
Apple, Dawn (Carolina Eye Associates, P.A. Inc.)	Professional (Current Pro)	
Apple, Harold J. (Indiana Health Information Exchange, Inc.)	Professional (Prior Pro)	
Apple, Robert E. (WesTower Communications, Inc.)	Professional (Current Pro)	
Apple (UK) Ltd.	Private Company (Operating Subsidiary)	
Applebee's Funding LLC	Private Fund (Operating)	

Automated findings using Axe

1. **SC 1.4.3 AA** – The ‘Result Name’, ‘Type’ and ‘Features’ are low in contrast. There is insufficient color contrast of 3.94 (foreground color: #808080, background color: #ffffff, font size: 9.0pt (12px), font weight: bold). Expected contrast ratio of 4.5:1.
2. **SC 1.4.3 AA** – The ‘Your search returned more than 200 results. Please refine your search’ content is low in contrast. There is insufficient color contrast of 3.57 (foreground color: #ff0000, background color: #f2f2f2, font size: 7.5pt (10px), font weight: normal). Expected contrast ratio of 4.5:1.
3. **SC 1.1.1 A** – All instance of “i” (quick info) and ‘alternate name arrow’ are missing an alternative description.
4. **SC 1.1.1 A** – The “search” image button is missing an alternate description.
5. **SC 1.3.1 A** – The ‘Search Profiles - search term’ field is missing a programmatic label.

Additional manual findings using NVDA screen reader

1. **SC 1.4.5 AA** – The “search” image button contains an image of text instead of real text.
2. **SC 2.1.1 A** – All instances of “i” (quick info) and ‘filter’ cannot be activated by a keyboard user.
3. **SC 4.1.2 A** – All instances of “i” (quick info) and ‘filter’ buttons are missing required roles and attributes to be identified as buttons.
4. **SC 1.4.11 AA** – All instances of “i” (quick info) are low in contrast in their default unfocused state.
5. **SC 1.4.10 AA** – When reflow rules are applied to the page; the content does not fit to a 320 px wide viewport.
6. **SC 4.1.2 A** – The ‘Filings and Annual Reports’, ‘Investment Research’, ‘Screening and Analytics’ and ‘Chart Builder’ tools are all missing an href in the link.
7. **SC 1.4.5 AA** – The ‘Filings and Annual Reports’, ‘Investment Research’, ‘Screening and Analytics’ and ‘Chart Builder’ tools images all contain images of text instead of real text.
8. **SC 4.1.2 A** – The ‘Filings and Annual Reports’, ‘Investment Research’, ‘Screening and Analytics’ and ‘Chart Builder’ tools are all missing an accessible link name.

9. **SC 2.1.1 A, 4.1.2 A** – The ‘Search type’ dropdown and ‘search tips’ button functions are not keyboard accessible and are missing required roles and attributes.
10. **SC 4.1.2 A** – The listing of tabs ‘Profiles’, ‘Lists’, ‘Funds’, ‘Products’ behave like a tab panel but are missing required ARIA roles and attributes to be identified and behave as one.
11. **SC 2.1.1 A** – A keyboard user cannot navigate tabs other than the default selected tab, to access content that a mouse user can hover to.
12. **SC 2.1.1 A** – A keyboard user cannot access all the filters.
13. **SC 1.3.1 A** – The Results Listing and visually associated column headings are implemented as two separate tables. Therefore, the visual column associations are not programmatically available.
14. **SC 1.3.1 A** – In the ‘Quick Info’ popup, the table row headings are not programmatically associated with their visually associated cells.

3. NetAdvantage Apple Inc.

Source: <https://www-capitaliq-com.proxy.wm.edu/CIQDotNet/company.aspx?companyId=24937>

Test case: Select Apple Inc. from results – test the landing page for the search result. Click the link for “Key Stats” under Financials / Valuation and test resulting page. From the filters on top, set “Units” to “Millions” > Select “Total Revenue” from the table and then click the link for “Chart Selected Items”.

The screenshot shows the NetAdvantage website interface. At the top, there is a search bar and navigation links. The main content area displays the profile for Apple Inc. (NasdaqGS:AAPL). The profile includes basic information such as the website (www.apple.com), number of employees (137,000), and year founded (1977). Below this, there is a business description, primary industry classification (Technology Hardware, Storage and Peripherals), and primary office location (One Apple Park Way | Cupertino, CA | 95014 | United States). The 'Current and Pending Investors' section lists various investment firms. The 'Prior Investors' section also lists several firms. A 'Stock Quote and Chart' section is visible, showing the last price (459.96) and other market data. A 'Quick Chart' window is open, displaying a bar chart of Total Revenue for various periods: 12 months Sep-26-2015A, 12 months Sep-24-2016A, 12 months Sep-30-2017A, 12 months Sep-29-2018A, 12 months Sep-28-2019A, and LTM Jun-27-2020A. The revenue values are approximately 220M, 225M, 235M, 265M, 255M, and 275M respectively.

Automated findings using Axe

1. SC 1.3.1 A – Input fields routinely are missing programmatic labels.
2. SC 4.1.2 A – Buttons routinely are missing button text or a label.
3. SC 1.4.3 AA – Color contrast for text often does not meet the minimum contrast ratio 4.5:1.
4. SC 4.1.1 A – IDs for elements are duplicated on the page when they must not be.
5. SC 1.1.1 A – Images are consistently missing an alternative description.

Additional manual findings using NVDA screen reader

1. SC 1.4.10 AA – When reflow rules are applied to the page; the content does not fit to a 320 px wide viewport.
2. SC 4.1.2 A – A slider function is missing required ARIA role and attributes to function as one.
3. SC 2.1.1 A – A keyboard user cannot select a row in the ‘Key Stats’ table like a mouse user can.
4. SC 2.4.4 A – ‘View details’ repetitive links do not programmatically indicate their unique purpose.
5. SC 1.4.1 A – Color is being used to communicate an increase or decrease in values.

6. **SC 2.1.1 A** – A keyboard user is unable to activate the data point tooltip items from the ‘Quick Chart’.
7. **SC 1.3.1 A** – The ‘Key Professionals’ and ‘Key Board Members’ tables are visually two tables but are programmatically a single table. Therefore, the table structure is not available to AT users, which includes the Name and Title column headings for both visual tables.
8. **SC 1.3.1 A** – Table row/column headings routinely are not programmatically identified.
9. **SC 1.1.1 A** – Toward the bottom of the page the ‘data provided by’ informative images are missing a descriptive alternative description. (“Ice”, “S&P Global Ratings”).
10. **SC 1.1.1 A** – The meaning behind the graph information is generally not described for AT users.
11. **SC 2.4.3 A** – When the ‘Chart Selected Items > Quick Chart’ is generated, focus is not set to the modal.
12. **SC 2.4.3 A** – For the ‘Chart Selected Items > Quick Chart’ modal, focus is not maintained in the modal.
13. **SC 2.1.1 A** – For the ‘Chart Selected Items > Quick Chart’ modal, a keyboard user is unable to activate the data point tooltip items.