INNODATA INC
Form 10-K
March 15, 2017

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

þ Annual report under section 13 or 15(d) of the securities exchange act of 1934
For the fiscal year ended December 31, 2016

.. Transition report under section 13 or 15(d) of the securities exchange act of 1934

Commission file number 0-22196

INNODATA INC.

(Exact name of registrant as specified in its charter)

Delaware	**13-3475943**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
55 Challenger Road	
Ridgefield Park, New Jersey	**07660**
(Address of principal executive offices)	(Zip Code)

(201) 371-8000
(Registrant's telephone number)

Securities registered under Section 12(b) of the Exchange Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock $.01 par value	The Nasdaq Stock Market LLC
Preferred Stock Purchase Right	The Nasdaq Stock Market LLC

Securities registered under Section 12(g) of the Exchange Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes ¨ No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ¨ No þ

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past twelve months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes þ No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No ¨

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. þ

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ¨ Accelerated filer þ Non-accelerated filer ¨ Smaller reporting company ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ¨ No þ

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant (based on the closing price reported on The Nasdaq Stock Market on June 30, 2016) was $59,244,244.

The number of outstanding shares of the registrant's common stock, $.01 par value, as of March 10, 2017 was 25,623,832.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive proxy statement for the 2017 Annual Meeting of Stockholders are incorporated by reference in Items 10,11,12,13 and 14 of Part III of this Form 10-K.

INNODATA INC

Form 10-K

For the Year Ended December 31, 2016

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PART I

Disclosures in this Form 10-K contain certain forward-looking statements, including without limitation, statements concerning our operations, economic performance, and financial condition. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The words “project,” “head start,” "believe," "expect," “should,” "anticipate," "indicate," "point to," “forecast,” “likely,” “goals,” “optimistic,” “foster,” “estimate” and other similar expressions generally identify forward-looking statements, which speak only as of their dates.

These forward-looking statements are based largely on our current expectations and are subject to a number of risks and uncertainties, including without limitation, that contracts may be terminated by clients; projected or committed volumes of work may not materialize; our Innodata Advanced Data Solutions ("IADS") segment is a venture formed in 2011 that has incurred losses since inception and has recorded impairment charges for all of its fixed assets; we currently intend to continue to invest in IADS; the primarily at-will nature of contracts with our Digital Data Solutions clients and the ability of these clients to reduce, delay or cancel projects; continuing Digital Data Solutions segment revenue concentration in a limited number of clients; continuing Digital Data Solutions segment reliance on project-based work; inability to replace projects that are completed, canceled or reduced; our dependency on content providers in our Media Intelligence Solutions segment; difficulty in integrating and deriving synergies from acquisitions, joint venture and strategic investments; potential undiscovered liabilities of companies and businesses that we may acquire; depressed market conditions; changes in external market factors; the ability and willingness of our clients and prospective clients to execute business plans which give rise to requirements for our services; changes in our business or growth strategy; the emergence of new or growing competitors; various other competitive and technological factors; and other risks and uncertainties indicated from time to time in our filings with the Securities and Exchange Commission and other risks and uncertainties set forth in “Risk Factors” in this Form 10-K or indicated from time to time in our other filings with the Securities and Exchange Commission.

Our actual results could differ materially from the results referred to in the forward-looking statements. In light of these risks and uncertainties, there can be no assurance that the results referred to in the forward-looking statements contained in this Form 10-K will occur.

We undertake no obligation to update or review any guidance or other forward-looking information, whether as a result of new information, future developments or otherwise.

Item 1. Business.

Business Overview

Innodata (NASDAQ: INOD) is a global digital services and solutions company. Our technology and services power leading information products and online retail destinations around the world. Our solutions help prestigious enterprises harness the power of digital data to re-imagine how they operate and drive performance. We serve publishers, media and information companies, digital retailers, banks, insurance companies, government agencies and many other industries. Founded in 1988, we comprise a team of 5,000 diverse people in eight countries who are dedicated to delivering services and solutions that help the world embrace digital data as a means of enhancing our lives and transforming our businesses.

The Company operates in three reporting segments: Digital Data Solutions (DDS), Innodata Advanced Data Solutions (IADS) and Media Intelligence Solutions (MIS).

Digital Data Solutions (DDS) Segment

Our DDS segment provides solutions to digital retailers, information services companies, publishers and enterprises that have one or more of the following broad business requirements: development of digital content (including e-books); development of new digital information products; and operational support of existing digital information products and systems. The DDS segment was formerly known as Content Services.

Many of our clients are driving or are responding to rapid and fundamental changes in the way end users discover, consume and create published information. For some of our publishing and information services clients, this means transforming information products from print to digital; for others, it means migrating already-digital products from web-only distribution to multiple-channel distribution that includes mobile and tablet devices and incorporates mobility, social platform and semantic search; and for others still, it means re-tooling pure search-based information products into workflow-embedded analytical tools that combine content with software to enable context-aware decision-making; and for a select number of our information services clients, it means embracing the content-as-a-service model to integrate content with other tools, applications and data. Each of these transformations requires shifts in products, as well as the technology and the operations that support them.

For our enterprise publishing clients, changes in the way end users discover, consume and create published information often necessitates replacing old processes and technologies that generated static, whole documents with new processes and technologies that enable content to reside as modular components which are re-combined dynamically to create up-to-date, product-specific assembly guides, engineering diagrams/schematics, compliance documentation, field operations guides and clinical documentation destined for simultaneous access on the web, from PCs, tablets and smartphones.

By blending consulting, technology and operations sourcing with deep domain expertise, we provide measurable outcomes for publishing companies, information services companies and enterprises through business transformation, accelerating innovation and efficient operations.

Information Product Development

We help our clients develop high-value information products. Our clients include four of the ten largest information industry companies in the world, spanning financial, legal, healthcare and scientific information. Information and publishing is a $1.5 trillion industry consisting of more than 7,000 publishers, information providers and software service firms worldwide. Many of our clients specialize in the scientific, technical and medical (STM) segment (estimated revenues of $125.8 billion) and the legal and regulatory (L&R) segment (estimated revenues of $22 billion)[1].

[1] Outsell Inc. (October 5, 2016). “Information Industry Outlook 2016 – All Data, Nothing But Data.”

Both STM and L&R publishers make some or all of their revenues from the sale of information products created from the primary and secondary data produced by professionals and researchers (in the case of STM) or courts, legislatures, administrative bodies and rule-making institutions (in the case of L&R).

We enable our clients to rapidly develop new digital products without direct investments in staff, facilities and technology. We embrace agile development methodologies that provide the benefits of early solution visualization and an iterative development process that spans content, technology and user interface development. We use a combination of onsite project management, onshore solutions architecture and offshore globally distributed teams of developers, analysts and subject-matter experts.

For example, a leading legal publisher sought to develop a new digital product that would provide lawyers and compliance officers a workflow tool for rule checking, rapid research and fact checking. The new digital tool needed to be accessible via laptops, smart phones and tablet devices. Moreover, it needed to be updated daily to maintain pace with rapid regulatory developments (it was destined to replace a printed loose leaf series that was updated only monthly). Our technology architects, developers and content analysts designed and implemented the new digital tool within budget and on schedule. Using the new digital tool, lawyers and compliance officers can now confidently react faster to their clients' increased regulatory burdens with up-to-date information.

For another leading global publisher, we developed an eReader application designed specifically for complex professional reference material. The publisher saw an opportunity to increase sales by re-publishing its printed reference works as e-books, but was unable to market them as e-books because existing eReader applications were built for simple fiction and trade books. We developed an eReader application for the client that changed this – it enabled advanced search, linking and cross-references to external sources, subscriber annotations, frequent textual updates and a host of other functions the publisher required in order to distribute its complex reference books as e-books over the iPad® as well as Android® and Windows-enabled mobile devices.

Operational Support

We help our clients significantly lower the cost of maintaining their high-value information products, applications and systems. Clients for which we perform such services include five of the top ten leading legal, tax and regulatory information providers, three of the top ten credit and financial information providers, and four of the top ten scientific, technical and medical information providers. Relative to information products, our focus is on the underlying "content supply chain" activities that are necessary to maintain the product. These activities often include content aggregation; extraction; encoding; indexing and abstracting; fabrication; and distribution. We deliver these activities on an outsourced basis.

For example, for an $8 billion leading provider of financial and news information, we aggregate public source documentation from a variety of government agencies, which we transform, analyze and extract in order to support a real-time, high-value information product.

For a leading wholesale textbook distributor, we provided support and maintenance for its digital book platform, including its customizable bookshelf and eReader applications and its conversion and fulfillment processes.

Digital Content Supply Chain Strategy

We work with clients at a strategic business and technology level to address business process and technology challenges related to digital content supply chain optimization and strategy. By aligning operations and technology with business goals, we help businesses accelerate new product development and introduction; control cost; consolidate and leverage technology investment; and obtain benefits of scale.

For a multinational information services company, we worked in conjunction with the client's internal teams to design new content architectures and implement new content technologies that enabled the client to migrate its operations away from process and technologies designed primarily for print output to new processes and technologies that were designed around the nature of the content itself and supported multiple simultaneous delivery channels.

A global information company had acquired two businesses that each collected, processed and managed some of the same public law content. The company recognized the opportunity to reduce cost by consolidating the processing of this overlapping content. To accomplish this cost savings, we implemented a new, consolidated workflow system using Alfresco and jBPM which provided a common framework for content reuse, while enabling content enrichment processes to be performed by external and internal resources in a fully managed environment.

For a publisher of legal treatises and practice guides and provider of on-demand learning, we created a future-state vision of operational workflows required to support an increasing array of technologies and online products. This future-state vision included recommendations regarding process improvements and new technologies.

E-Book Production and Distribution

We manufacture both standard e-books and interactive e-books in a variety of formats (including EPUB, Mobi and Kindle) and in 12 major languages (including Japanese and Chinese). In addition, we distribute e-books on behalf of publishers and authors to more than 25 e-book retailers across North America, the United Kingdom, Australia and 24 countries in the European Union. Since the fall of 2011, we have produced over 1.3 million e-book titles.

Innodata Advanced Data Solutions (IADS) Segment

Many enterprises are embracing new digital information technologies and workflow processes within their operations in order to improve internal decision-support systems. We formed our IADS segment in mid-2011 to design and develop new capabilities to enable clients in the financial services, insurance, medical and healthcare sectors to improve decision-support through digital technologies. We believe that by creating and commercializing innovative business strategies and technology solutions we will be able to accelerate our growth and reduce our revenue volatility.

IADS operates through two subsidiaries: Synodex and docGenix. As of December 31, 2016, we owned 91% of Synodex and 94% of docGenix.

The main focus of the Synodex business is the extraction and classification of data from unstructured medical records in an innovative way to provide improved data service capabilities for insurance underwriting, insurance claims, medical records management and clinical trial support services. Synodex has developed and deployed its APS.Extract® product for specific use with life insurance underwriting and claims.

At the end of 2016, Synodex had 11 clients, including RGA Reinsurance Company, the principal operating subsidiary of Reinsurance Group of America, Incorporated (NYSE: RGA), one of the top 10 largest providers of life reinsurance in the world according to A.M. Best, and John Hancock Insurance, the insurance operating unit of John Hancock Financial (a division of Manulife) and one of the largest life insurers in the United States. Synodex is engaged in business discussions with other reinsurance companies and insurance carriers that have expressed interest in utilizing its services.

The main focus of the docGenix business is the extraction and classification of data from unstructured legal documents in order to improve an organization's ability to analyze documentation and feed actionable data to downstream applications.

We offer docGenix services to banks and hedge funds. One of our clients, a large New York-based global investments company party to more than 5,000 derivative contracts, utilizes the docGenix service and software platforms to monitor and react to market changes and counterparty and collateral changes and to comply with increasing regulatory requirements. Prior to utilizing docGenix, these were slow and resource-intensive activities because contract creation, storage and retrieval processes were all still paper or image based. Using docGenix's system, complex derivative contracts are transformed into machine readable, computer-addressable data that is down-streamed to risk collateral and other mission-critical systems, and users can perform multi-dimensional, complex queries instantaneously.

In 2016, our investment net of revenues in these subsidiaries was approximately $1.8 million. In the immediate future, we intend to continue to invest in these subsidiaries at the combined rate of $0.1 to $0.4 million per quarter.

Media Intelligence Solutions (MIS) Segment

Our MIS segment operates through our MediaMiser, Bulldog Reporter and the Agility PR Solutions subsidiaries. In December 2016, we rebranded the MediaMiser and Agility PR Solutions products under the name Agility PR Solutions.

Agility Enterprise (formerly known as MediaMiser Enterprise) provides media monitoring and analysis solutions and professional services to several Fortune 500 companies and Canadian government institutions, as well as small- and medium-sized businesses. Agility Enterprise enables companies to reduce the time and effort required to extract, analyze and share valuable business intelligence from traditional and online media sources.

Agility Enterprise’s proprietary technology platform monitors, aggregates, analyzes and distributes summaries of coverage from more than 200,000 content sources including traditional and digital media. The platform includes a powerful sentiment analysis engine that identifies whether opinions expressed in a particular document are positive, negative or neutral.

Increasingly, organizations seek to quantify the impact of public relations (PR) and communications activities and to understand what is being said about them across traditional and digital media. Social media has also dramatically changed how organizations manage and respond to crisis. Organizations need to respond quickly to negative customer feedback or coverage and track ongoing conversations in order to protect their brand and reputation. Agility Enterprise, with its powerful analytics and human augmented analysis and reporting, is designed to fit these needs.

We acquired the Agility business from PR Newswire in July 2016. The acquisition included close to 1,400 customers and approximately 50 employees in the US and the UK. Agility’s business consists of two products - Agility which is a global media contact database and email distribution platform, and Agility Plus which provides additional self-service media monitoring and analytics capabilities. This acquisition fostered growth in North America and Europe and expanded our suite of products for the PR marketplace. With this acquisition, Agility PR Solutions can now offer self and full-service solutions that address the entire communications life cycle – from identifying influencers, amplifying messages, monitoring coverage, to measuring impact.

In 2016 we entered into an agreement with BusinessWire, a Berkshire Hathaway company, to offer Agility media database and monitoring products to its customers worldwide.

Bulldog Reporter is a news aggregation service for the PR and corporate communications professionals. Bulldog Reporter publishes a well-known daily e-newsletter, the Daily Dog. In addition, it offers a paid subscription service focused specifically on the health industry, a daily e-newsletter—Inside Health Media—that provides a health related media list and media intelligence services by leveraging the data from Agility platform. Bulldog Reporter also manages a PR industry awards program—the Bulldog Awards—which recognizes PR and communications professionals in categories including corporate social responsibility, media relations, digital and social marketing, not-for-profit activity and overall outstanding PR performance.

With considerable consolidation and slowing growth in the overall media intelligence market, Agility PR Solutions is carving out a niche with a focus on influencer targeting, advanced media analytics and editorially enriched full-service options that provide context and clarity that automated solutions alone cannot provide. This focus on technology as well as customer service differentiates Agility PR Solutions from the clippings-origin and self-service monitoring competitors in the market.

Our Global Operations

We provide our services using a globally distributed workforce utilizing advanced technologies that automate portions of our process and help ensure that our work product is highly accurate and consistent.

Our delivery centers in Asia are ISO 27001 certified. In addition, we comply with the requirements of the United States Health Insurance Portability and Accountability Act of 1996 as amended (HIPAA) (including by the Health Information Technology for Economic and Clinical Health Data (HITECH)) and the United Kingdom’s Data Protection Act 1998 (DPA), as applicable. Innodata is certified to the EU-U.S. Privacy Shield framework, which certification includes Synodex, docGenix, Agility PR Solutions and Bulldog Reporter as covered entities, and Innodata and Synodex are U.S. Safe Harbor registered entities that adhere to the Switzerland Safe Harbor Frameworks on the protection of personal data. We encrypt all individual protected health information, both at rest and in motion, to the AES 256 or similar standard, and we employ a range of security features including monitored firewalls and intrusion detection devices.

For our data extraction services, we maintain staff in a wide spectrum of disciplines, including medicine, law, engineering, management, finance, science and the humanities.

Our services are organized and managed around three vectors: a vertical industry focus, a horizontal service/process focus, and a supportive operations focus.

The vertically-aligned groups understand our clients’ businesses and strategic initiatives. The vertical group for each particular industry includes experts hired from that industry.

Our service/process-aligned groups include engineering personnel and delivery personnel. Our engineering teams are responsible for creating secure and efficient custom workflows and integrating proprietary and third-party technologies to automate manual processes and improve the consistency and quality of our work product. These tools include categorization engines that utilize pattern recognition algorithms based on comprehensive rule sets and related heuristics, data extraction tools that automatically retrieve specific types of information from large data sources, and workflow systems that enable various tasks and activities to be performed across our multiple facilities.

Our globally distributed delivery personnel are responsible for executing our client engagements in accordance with service-level agreements. We deliver services from facilities in the United States, the Philippines, India, Sri Lanka, Israel, United Kingdom, Germany and Canada.

Other support groups are responsible for managing diverse enabling functions including human resources, organizational development, network and communications technology infrastructure support and physical infrastructure and facilities management.

Our sales staff, program managers and consultants operate primarily from our North American and European locations, as well as from client sites.

Our Opportunity

Rapid changes in digital content technologies have created the need for all sorts of companies to refashion their product offerings and their operations. Media, publishing and information services companies contend with new monetization models, delivery platforms, and channels. They seek to develop new digital products as print product revenue wanes; to broaden their markets by distributing content over the iPad®, iPhone®, Android and other portable devices; and to monetize existing content in new, highly targeted custom products through flexible reuse and repurposing.

Meanwhile, for enterprises that rely on content to support operations, this shift to digital technology offers opportunities to improve internal decision support and risk mitigation in complex data operations by harnessing the power of machine-readable, digital data to drive improved decision support. For enterprises that rely on content to support products, this shift to digital technology offers opportunities to create and manage content more efficiently, while at the same time distributing content through an increased number of channels.

As a result, media, publishing and information services companies, and content-intensive enterprises, are increasingly relying on service providers, such as Innodata, to provide digital content-related services. These services increasingly involve using advanced technologies such as machine learning and artificial intelligence (AI) to extract meaningful data from unstructured data in cost efficient ways.

Clients

Two clients in our DDS segment each generated more than 10% of our total revenues in the fiscal year ended 2016. Revenues from Wolters Kluwer affiliated companies (the “WK Clients”) were approximately $10.9 million or 17% of total revenues, and revenues from Reed Elsevier affiliated companies (the “RE Clients”) were approximately $8.5 million, or 14% of total revenues. No other client generated more than 10% of our total revenues in 2016. These two clients together generated approximately 31%, 33% and 31% of our total revenues in the fiscal years ended December 31, 2016, 2015 and 2014, respectively. Revenues from clients located in foreign countries (principally in Europe) accounted for 49%, 51% and 47% of our total revenues for these respective fiscal years.

We have long-standing relationships with many of our clients, and we have provided services to the two clients mentioned in the preceding paragraph for over ten years. Our track record of delivering high-quality services helps us to solidify client relationships. Many of our clients are recurring clients, meaning that they have continued to provide additional projects to us after our initial engagement with them.

Our contractual arrangements with the RE Clients during 2016 consisted of four master services agreements (“MSAs”) and separately agreed to statements of work (“SOWs”) for specific services. Two of the MSAs have indefinite terms, one MSA has a term that ends on October 31, 2019 and the fourth MSA had a term that ended on October 31, 2016. RE Clients may terminate the MSAs on notice periods ranging from zero to six months, and they may terminate certain individual SOWs on notice periods of up to 180 days. They may also terminate certain of the MSAs and SOWs on notice periods of three months or less for “cause” and for insolvency related events, and on changes of control, force majeure and the imposition of certain price increases by the Company that are not acceptable to them. We may terminate two of the MSAs on notice periods of 180 days, and we may also terminate certain MSAs and SOWs for “cause”, insolvency related events affecting the RE Clients, and other defined events. The MSAs contain confidentiality, limitation of liability, indemnification and other standard provisions.

Our contractual arrangements with the WK Clients during calendar year 2016 consisted of five MSAs and separately agreed to SOWs for specific services. Three MSAs have indefinite terms, one MSA continues in effect until the completion of all services performed under the MSA, and the fifth MSA has a term that ends on the later of March 1, 2017 or the expiration date of all SOWs issued under the MSA. WK Clients may terminate certain MSAs on notice periods ranging from 30 days to three months, and they may terminate certain individual SOWs on notice periods ranging from 10 days to six months. WK Clients may also terminate certain of the MSAs and SOWs on notice periods of 60 days or less for “cause” and for insolvency related events, and on changes of control, force majeure and the imposition of certain price increases by the Company that are not acceptable to them. We may terminate certain of the MSAs on notice periods ranging from 30 days to three months, and we may also terminate certain MSAs and SOWs for “cause”, insolvency related events affecting the WK Clients, and other defined events. The MSAs contain confidentiality, limitation of liability, indemnification and other standard provisions.

Our agreements with our other clients are in many cases terminable on 30 to 90 days' notice. A substantial portion of the services we provide to our clients is subject to their requirements.

Competitive Strengths

Our expertise in digital data. We are primarily focused on helping clients across multiple vertical industries by supplying enriched digital data at a lower cost which is either incorporated in clients' information products or used for enhancing decision-support systems. We also help clients build new information or data products.

Our focus on quality. We have achieved a reputation with our clients for consistent high-quality. We maintain independent quality assurance capabilities in all geographies where we have delivery centers. Our quality assurance teams in Asia are compliant and certified to the ISO 9001:2008 quality management system standards.

Our global delivery model. We have operations in eight countries in North America, Europe and Asia. We provide services to our clients through a comprehensive global delivery model that integrates both local and global resources to obtain the best economic results.

Our proven track record and reputation. By consistently providing high-quality services, we have achieved a track record of client successes. This track record is reflected in our reputation as a leading service provider within the media, publishing and information services sector. Our reputation and brand connote an assurance of expertise, quality execution and risk mitigation.

Our focus on technology and engineering innovation. Our engineering and IT teams integrate proprietary and best-in-class third party tools into our workflows to drive as much automation as possible. In addition, our engineering and IT teams provide services directly to our clients, helping them achieve improved efficiencies within their own operations.

Our long-term relationships with clients. We have long-term relationships with many of our clients, who frequently retain us for additional projects after a successful initial engagement. We believe there are significant opportunities for additional growth with our existing clients, and we seek to expand these relationships by increasing the depth and breadth of the services we provide. This strategy allows us to use our in-depth client-specific knowledge to provide more fully integrated services and develop closer relationships with those clients.

Our ability to scale. We have demonstrated the ability to expand our teams and facilities to meet the needs of our clients. By virtue of the significant numbers of professional staff working on projects, we are able to build teams for new engagements quickly. We have also demonstrated the ability to hire and train staff quickly in order to service diverse and often large-scale needs of our clients.

Our internal infrastructure. We own and operate some of the most advanced content delivery centers in the world, which are linked by multi-redundant data connections. Our Wide Area Network – along with our Local Area Networks, Storage Area Networks and data centers – is configured with industry standard redundancy, often with more than one backup to help ensure 24x7 availability. Our infrastructure is built to accommodate advanced tools, processes and technologies that support our content and technical experts. We encrypt all individual protected health information, both at rest and in motion, to the AES 256 or similar standard, and we employ a range of security features including managed firewalls and intrusion services.

Sales and Marketing

For our DDS and IADS segments we market and sell our services directly through our professional staff, senior management and direct sales personnel operating primarily from various locations in the U.S., and for our MIS segment we market and sell our services primarily from our offices in Canada and the United Kingdom and through our personnel in the U.S. Our corporate headquarters is located at Ridgefield Park, New Jersey, just outside New York City. During 2016, we had four executive-level business development and marketing professionals and approximately 34 sales and marketing personnel. We also deploy solutions architects, technical support experts and consultants who support the development of new clients and new client engagements. These resources work within teams (both permanent and ad hoc) that provide support to clients.

Our marketing department and sales professionals work together to generate leads. Our sales professionals identify and qualify prospects, securing direct personal access to decision makers at existing and prospective clients. They facilitate interactions between client personnel and our service teams to define ways in which we can assist clients with their goals. For each prospective client engagement, we assemble a team of our senior employees drawn from various disciplines within our Company. The team members assume assigned roles in a formalized process, using their combined knowledge and experience to understand the client’s goals and collaborate with the client on a solution.

Our marketing organization is responsible for developing and increasing the visibility and awareness of our brand and our service offerings, defining and communicating our value proposition, generating qualified, early-stage leads and furnishing effective sales support tools

As part of our marketing strategy we partner with media organizations to build awareness, establish a reputation as an industry thought leader, and generate leads. Media partners include trade associations and publications, trade show producers and consulting organizations. These partnerships are particularly valuable in enterprise industries as we build our presence among digital content leaders and decision makers.

Primary marketing outreach activities include content marketing, event marketing (including exhibiting at trade shows, conferences and seminars), direct and database marketing, public and media relations (including speaking engagements), and web marketing (including integrated marketing campaigns, search engine optimization, search engine marketing and the maintenance and continued development of external websites).

Sales activities include lead generation, nurturing leads, engaging in discussions with prospective customers to understand their needs, demonstrating our products, designing solutions, responding to requests for proposals, and managing account and client relationships and activities.

Personnel from our solutions analysis group, our client services group and our engineering services group closely support our direct sales effort. These individuals assist the sales force in understanding the technical needs of clients and providing responses to these needs, including demonstrations, prototypes, pricing quotations and time estimates. In addition, account managers from our customer service group support our direct sales effort by providing ongoing project-level support to our clients.

Research and Development

We incurred $0.1 million in research and development costs in our DDS segment for the year ended December 31, 2016 and none for the years ended December 31, 2015 and 2014. We did not incur any research and development costs for our IADS segment in any of the three years ended December 31, 2016, 2015 or 2014. Our MIS segment incurred research and development costs of $0.9 million, $1.0 million and $0.6 million for the years ended December 31, 2016 and 2015 and during the period from the date of acquisition (July 28, 2014) to December 31, 2014, respectively.

Competition

Our Digital Data Solutions segment operates in a highly competitive, fragmented and intense market. Major competitors include Apex CoVantage, Aptara, Cenveo, Infosys, HCL Technologies, Macmillan India, SPI Technologies, JSI S.A.S. Groupe Jouve and Thomson Digital.

We compete in this market by offering high-quality services and competitive pricing that leverage our technical skills, IT infrastructure, offshore model and economies of scale. Our competitive advantages are especially attractive to clients for undertakings that are technically challenging, are sizable in scope or scale, are continuing, or that require a highly fail-safe environment with technology redundancy.

The Synodex subsidiary of our IADS segment competes in the insurance data analysis industry with an initial focus on applying innovative technology to speed accurate decision making and to improve productivity in the processing of medical files for the life insurance industry. Major competitors are Risk Righter, EMSI, Parameds, and other BPO companies all of whom are large firms with established client bases. We also compete with in-house personnel at existing or prospective clients who may attempt to duplicate our services in-house or use alternative approaches to fulfill their needs.

For our MIS segment, our primary competitors are companies such as Meltwater, Cision, Kantar, Infomart, Nasdaq, Intelligent I.Q., Trendkite and Custom Scoop, several of which are large firms with established customer bases, as well as PR firms that provide media monitoring and analysis services and journalist and influencer databases. Our competitors also include social media listening companies and start-ups offering platforms to amplify messages by targeting social media influencers.

Locations

We are headquartered in Ridgefield Park, New Jersey, just outside New York City. Our MIS business is headquartered in Ottawa, Canada and we have an additional location in London, United Kingdom. We have ten delivery centers in the Philippines, India, Sri Lanka, Canada, Germany, United Kingdom and Israel.

Employees

As of December 31, 2016, we employed approximately 150 persons in the United States, Canada and United Kingdom, and over 4,600 persons in ten global delivery centers in the Philippines, India, Sri Lanka, Canada, Germany, United Kingdom and Israel. As of December 31, 2016, approximately 260 of our employees were dedicated to the IADS segment, and approximately 190 of our employees were dedicated to the MIS segment. Most of our employees have graduated from at least a two-year college program. Many of our employees hold advanced degrees in law, business, technology, medicine and social sciences. No employees are currently represented by a labor union, and we believe that our relations with our employees are satisfactory.

Corporate Information

Our principal executive offices are located at 55 Challenger Road, Ridgefield Park, New Jersey 07660, and our telephone number is (201) 371-8000. Our website is www.innodata.com; information contained on our website is not included as a part of, or incorporated by reference into, this Annual Report on Form 10-K. There we make available, free of charge, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after we electronically file that material with, or furnish it to, the Securities and Exchange Commission (SEC). Our SEC reports can be obtained through the Investor Relations section of our website or from the Securities and Exchange Commission at www.sec.gov.

Item 1A. Risk Factors.

We have historically relied on a very limited number of clients that have accounted for a significant portion of our revenues, and our results of operations could be adversely affected if we were to lose one or more of these significant clients.

We have historically relied on a very limited number of clients that have accounted for a significant portion of our revenues. Two clients in our DDS segment generated approximately 31%, 33% and 31% of our total revenues in the fiscal years ended December 31, 2016, 2015 and 2014, respectively. Another client in the DDS segment accounted for less than 10% of the Company's total revenues for the years ended December 31, 2016 and 2015 but accounted for 10% of the Company's total revenues for the year ended December 31, 2014. No other client accounted for 10% or more of total revenues during these periods. Further, in the years ended December 31, 2016, 2015 and 2014, revenues from non-US clients accounted for 49%, 51% and 47%, respectively, of our revenues. We may lose any of these clients, or our other major clients, as a result of our failure to meet or satisfy our client's requirements, the completion or termination of a project or engagement, or the client's selection of another service provider.

In addition, the volume of work performed for our major clients may vary from year to year, and services they require from us may change from year to year. They may also request that we modify certain key terms of our agreements with them as a condition of continuing to do business with us. If the volume of work performed for our major clients varies, if the services they require from us change, or if they require price concessions (as was required by a major customer in 2016 (see "Management Discussion and Analysis"), our revenues and results of operations could be adversely affected, and we may incur a loss from operations. If certain key terms of our agreements with our major clients are modified, our revenues and results of operations may be adversely affected. Our services are typically subject to client requirements, and in many cases are terminable upon 30 to 90 days' notice.

A portion of our services is provided on a non-recurring basis for specific projects, and our inability to replace large projects when they are completed or otherwise terminated has adversely affected, and could in the future adversely affect, our revenues and results of operations.

We provide a portion of our services for specific projects that generate revenues that terminate on completion of a defined task. While we seek, wherever possible, on completion or termination of large projects, to counterbalance periodic declines in revenues with new arrangements to provide services to the same client or others, our inability to obtain sufficient new projects to counterbalance any decreases in such work may adversely affect our future revenues and results of operations.

A portion of our revenue is generated from projects which we characterize as recurring in nature. Projects that we characterize as recurring are nevertheless subject to termination.

Our operating performance is materially dependent on the continuation of these projects. However, we are exposed to risks where these projects could be terminated by our clients and we may not be able to replace these terminated projects with new recurring projects with similar profitability or clients may ask for a price reduction which could adversely affect our revenue and results of operations.

Our solutions for the MIS segment are sold pursuant to subscription agreements, and if subscription clients elect either not to renew these agreements, or to renew these agreements for less expensive services, our revenues and results of operations will be adversely affected.

Our MIS segment derives its revenues primarily from subscription arrangements. Our clients may choose not to renew subscription agreements when they expire or may renew them at lower prices or for a significantly narrower scope of work. If large numbers of existing subscription clients do not renew these agreements, or renew these agreements on terms less favorable to us, and if we cannot replace or supplement those non-renewals with new subscription agreements generating the same or greater level of revenue, our revenues and results of operations will be adversely affected.

The Synodex and docGenix subsidiaries in our IADS segment have incurred significant losses since their inception in 2011.

We have invested significant amounts in the Synodex and docGenix subsidiaries of our IADS segment. Our cumulative investment net of revenues in these subsidiaries as of December 31, 2016 was $33.0 million, consisting of $26.0 million in operating expenses and $7.0 million in capital expenditures. In the third quarter of 2013 we wrote off all the fixed assets of IADS, and we have expensed all investments in IADS since that date. During 2016, these subsidiaries generated approximately $4.3 million in revenues and incurred a net loss of $1.8 million net of inter-segment profits. Our operations and financial condition will be adversely affected if IADS fails to generate meaningful revenues and margins.

Our liquidity could be affected if our losses continue.

We believe that our existing cash and cash equivalents and internally generated funds will provide sufficient sources of liquidity to satisfy our financial needs for the next 12 months. However, we have no bank facilities or lines of credit, and continuing material reductions in our cash and cash equivalents from operating losses, capital expenditures, acquisitions or otherwise could materially and adversely affect the Company. See “Management Discussion and Analysis – Liquidity and Capital Resources” for information on (i) our cash and cash equivalents that declined to $14.2 million at December 31, 2016 from $24.9 million at December 31, 2015, (ii) the portion of our cash and cash equivalents that at December 31, 2016 was held by our foreign subsidiaries and that can be repatriated to the United States (as deemed dividends or otherwise) only subject to United States federal income taxes, (iii) the cash used in 2016 in our operating activities as a result of our net loss in 2016, (iv) the cash used in 2016 in our investing activities for the acquisition and integration of Agility and capital expenditures and (v) our current plans for the use of our cash and cash equivalents.

New acquisitions, joint ventures or strategic investments or partnerships could harm our operating results.

In July 2016, we acquired the Agility business from PR Newswire, comprised of the Agility and Agility Plus products, pursuant to an asset purchase agreement. Agility is a global media contact database and email distribution platform and Agility Plus provides additional self-service media monitoring and analytics capabilities. In July 2014, we acquired MediaMiser Ltd., a Canada-based provider of automated, real-time traditional and social media monitoring services, and in December 2014, we acquired intellectual property and related assets of Bulldog Reporter from Sirius Information, Inc.

We may pursue additional acquisitions, joint ventures or engage in strategic investments or partnerships to grow and enhance our capabilities. We cannot assure that we will successfully consummate any acquisitions or joint ventures, or profit by strategic investments, or achieve desired financial and operating results. Further, such activities involve a number of risks and challenges, including proper evaluation, diversion of management’s attention and proper integration with our current business. Accordingly, we might fail to realize the expected benefits or strategic objectives of any such venture we undertake. If we are unable to complete the kind of acquisitions for which we plan, we may not be able to achieve our planned rates of growth, profitability or competitive position in specific markets or services.

A large portion of our accounts receivable is payable by a limited number of clients; the inability of any of these clients to pay its accounts receivable would adversely affect our results of operations.

Several significant clients account for a large percentage of our accounts receivable. If any of these clients were unable, or refused, for any reason, to pay our accounts receivable, our financial condition and results of operations would be adversely affected. As of December 31, 2016, 52% or $5.2 million, of our accounts receivable was due from three clients. See “Liquidity and Capital Resources.” In 2016 we deferred $750,000 of revenue from one client that will be accounted for on a cash basis and we also recorded a $150,000 allowance for accounts receivable from this client.

In addition, we evaluate the financial condition of our clients and usually bill and collect on relatively short cycles. We maintain specific allowances against doubtful receivables. Actual losses on client balances could differ from those that we currently anticipate and, as a result, we might need to adjust our allowances. There is no guarantee that we will accurately assess the creditworthiness of our clients. Macroeconomic conditions could also result in financial difficulties, including limited access to the credit markets, insolvency or bankruptcy, for our clients, and, as a result, could cause clients to delay payments to us, request modifications to their payment arrangements that could increase our receivables balance, or default on their payment obligations to us. If we are unable to collect timely from our clients, our cash flows could be adversely affected.

Quarterly fluctuations in our revenues and results of operations could make financial forecasting difficult and could negatively affect our stock price.

We have experienced, and expect to continue to experience, significant fluctuations in our quarterly revenues and results of operations. During the past eight quarters, our net income ranged from a profit of approximately $0.4 million in the third quarter of 2015 to a loss of approximately $2.8 million in the third quarter of 2016.

We experience fluctuations in our revenue and earnings as we replace and begin new projects, which may have some normal start-up delays, or we may be unable to replace a project entirely or on terms that are as attractive to us as the project that is being replaced. These and other factors may contribute to fluctuations in our results of operations from quarter to quarter.

A high percentage of our operating expenses, particularly personnel and rent, are relatively fixed in advance of any particular quarter. As a result, unanticipated variations in the number and timing of our projects, or in employee wage levels and utilization rates, may cause us to significantly underutilize our production capacity and employees, resulting in significant variations in our operating results in any particular quarter, and have resulted in losses.

The economic environment and pricing pressures could negatively impact our revenues and operating results.

Due to the intense competition involved in outsourcing and information technology services, we generally face pricing pressures from our clients. Our ability to maintain or increase pricing is restricted as clients generally expect to receive volume discounts or special pricing incentives as we do more business with them; moreover, our large clients may exercise pressure for discounts outside of agreed terms.

Our profitability could suffer if we are not able to maintain pricing on our existing projects and win new projects at appropriate margins.

Our profit margin, and therefore our profitability, is dependent on the rates we are able to recover for our services. If we are not able to maintain pricing on our existing services and win new projects at profitable margins, or if we underestimate the costs or complexities of new projects and incur losses, our profitability could suffer. The rates we are able to recover for our services are affected by a number of factors, including competition, volume fluctuations, productivity of employees and processes, the value our client derives from our services and general economic and political conditions.

If our pricing structures do not accurately anticipate the cost and complexity of performing our work, then our contracts could be unprofitable.

We provide services either on a time-and-materials basis or on a fixed-price basis. Our pricing is highly dependent on our internal forecasts and predictions about our projects, which might be based on limited data and could turn out to be inaccurate. If we do not accurately estimate the costs and timing for completing projects, our contracts could prove unprofitable for us or yield lower profit margins than anticipated.

We may not be able to obtain price increases that are necessary to offset the effect of wage inflation and other government mandated cost increases.

We have experienced wage inflation and other government mandated cost increases in the Asian countries where we have the majority of our operations. In addition, we may experience adverse fluctuations in foreign currency exchange rates. These global events have put pressure on our profitability and our margins. Although we have tried to partially offset wage increases, foreign currency fluctuations and other such increases through price increases and improving our efficiency, we cannot ensure that we will be able to continue to do so in the future, which would negatively impact our results of operations.

If our clients are not satisfied with our services, they may terminate our contracts with them or our services, which could have an adverse impact on our business.

Our business model depends in large part on our ability to attract additional work from our base of existing clients. Our business model also depends on relationships our account teams develop with our clients so that we can understand our clients' needs and deliver solutions and services that are tailored to those needs. If a client is not satisfied with the quality of work performed by us, or with the type of services or solutions delivered, then we could incur additional costs to address the situation, the profitability of that work might be impaired, and the client's dissatisfaction with our services could damage our ability to obtain additional work from that client. In particular, clients that are not satisfied might seek to terminate existing contracts, which would mean that we could incur costs for the services performed with no associated revenue upon termination of a contract. This could also direct future business to our competitors. In addition, negative publicity related to our client services or relationships, regardless of its accuracy, may further damage our business by affecting our ability to compete for new contracts with current and prospective clients.

Our new clients may sunset their products because of lack of sufficient revenues or declining revenues, and this may result in termination of our work for these clients.

As we obtain new opportunities and win new business, our clients may not generate the level of revenues that we initially anticipated at the time of signing a contract with them, or our clients may experience declining revenues with their existing products. This could be due to various reasons beyond our control, and it could lead to termination of projects or contracts. As we normally invest in people or technology and incur other costs in anticipation of revenues, any such deviation from our expected plan would impact our margins and earnings.

Our business will suffer if we fail to develop new services and enhance our existing services in order to keep pace with the rapidly evolving technological environment or provide new service offerings, which may not succeed.

The information technology and consulting services industries are characterized by rapid technological change, evolving industry standards, changing client preferences, new product and service introductions and the emergence of new vendors with lean cost and flexible cost models. Our future success will depend on our ability to develop solutions that keep pace with changes in the markets in which we provide services. We cannot guarantee that we will be successful in developing new services, addressing evolving technologies on a timely or cost-effective basis or, if these services are developed, that we will be successful in the marketplace. We also cannot guarantee that we will be able to compete effectively with new vendors offering lean cost and flexible cost models, or that products, services or technologies developed by others will not render our services non-competitive or obsolete. Our failure to address these developments could have a material adverse effect on our business, results of operations and financial condition.

We invest in developing and pursuing new service offerings from time to time. Our profitability could be reduced if these services do not yield the profit margins we expect, or if the new service offerings do not generate the planned revenues.

We have made and continue to make significant investments towards building-out new capabilities to pursue growth. These investments increase our costs, and if these services do not yield the revenues or profit margins we expect, and we are unable to grow our business and revenue proportionately, our profitability may be reduced, or we may incur losses.

We depend on third-party technology in the provision of our services.

We rely upon certain software that we license from third parties, including software integrated with our internally developed software used in the provision of our services. These third-party software licenses may not continue to be available to us on commercially reasonable or competitive terms, if at all. The loss of, or inability to maintain or obtain any of these software licenses, could result in delays in the provision of our services until we develop, identify, license and integrate equivalent software. Any delay in the provision of our services could damage our business and adversely affect our results of operations. In addition, for our Synodex and docGenix subsidiaries of our IADS segment, we utilize third party data centers to serve our clients and generate revenue. Any disruption in provision of services from these data centers could result in loss of revenue, client dissatisfaction and loss of clients.

Our MIS segment relies on third parties to provide certain content and data for our solutions, and if those third-parties discontinue providing their content, our revenue and results of operations could be adversely affected.

Our MIS segment relies on third parties to provide or make available certain data for our information databases and our news and social media monitoring service. These third parties may not renew agreements to provide content to us or may increase the price they charge for their content. Additionally, the quality of the content provided to us may not be acceptable to us and we may need to enter into agreements with additional third parties. In the event we are unable to use such third-party content or are unable to enter into agreements with new third parties, current clients may discontinue their relationship with us, and it may be difficult to acquire new clients.

Our businesses are reliant on key employees, and we may face high attrition in our talent. We may not be able to replace displaced talent with new talent on a timely basis or with equivalent skill sets.

We are reliant to a considerable degree on the continuing leadership of our Chief Executive Officer and would be materially and adversely affected should he unexpectedly not be employed by us. In addition, our businesses are subject to fierce competition for