

Alexa, Is AI Taxable?

by Martin I. Eisenstein, Michael Carey, and Jamie Szal

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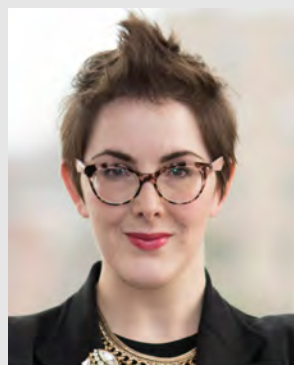
by Martin I. Eisenstein, Michael Carey, and Jamie Szal



Martin I. Eisenstein



Michael Carey



Jamie Szal

Martin I. Eisenstein is managing partner of Brann & Isaacson of Lewiston, Maine; Michael Carey and Jamie Szal are lawyers with the firm. All are members of the Brann & Isaacson group that represents the firm's business clients — including providers of artificial intelligence and information technology and telecommunications services, as well as a quarter of the 100 largest internet retailers — in state and local tax and

unclaimed property matters.

In this installment of Eyes on E-Commerce, the authors discuss issues practitioners face when advising clients on the sales tax treatment of technology products and services that incorporate AI. No state or local jurisdiction taxes AI as such but, depending on the contract and nature of services, these products and services may be characterized in the more traditional sales tax categories of information services, software as a service, data processing, consulting, and custom software development. The authors conclude that practitioners must closely examine the contract, promotional materials, and the facts and circumstances of each situation to determine the true object of the transaction.

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We write this article as the novel coronavirus crisis rages throughout the world. In the tumultuous circumstances of recent weeks, the world finds itself more dependent than ever on the digital economy. Before the crisis, businesses and technologists developed techniques to analyze complex data — many of which use artificial intelligence technologies — for various business and medical applications. We anticipate that similar AI techniques will be used to sift through massive data sets to make predictions to curtail the spread of COVID-19 and to develop vaccines and medications for its cure.

That brings us to the subject of this article: the challenges in applying sales tax laws to AI services. We will address the state income tax issues for AI providers in an article next month as Part II of our two-part AI series. But first, to help frame the discussion, we provide background regarding the service of AI.

Artificial Intelligence

Artificial intelligence is the use of a computer system — hardware and software — to perform tasks that typically require human intelligence.¹ At their core, AI technologies are innovative tools to improve both the productivity and efficiency of human labor. AI allows companies to analyze more data, more efficiently, and certainly faster.

Since Alan Turing first discussed the concept of “thinking machines” in 1950,² AI has developed to have widespread application. Examples of technology incorporating AI include portable devices featuring speech recognition products, such as Siri or Alexa; healthcare diagnostic and

¹ BuiltIn.com, “What Is Artificial Intelligence,” (last visited Apr. 28, 2020); Encyclopedia Britannica, Artificial Intelligence (last visited Apr. 28, 2020).

² Noel Sharkey, “Alan Turing: The Experiment that Shaped Artificial Intelligence,” BBC News, June 21, 2012.

scheduling applications, such as IBM's Watson and chatbots; robotic process automation used in manufacturing; self-driving cars, such as Tesla; and thermostat control products, such as Nest.³ Each of these products is based on software — so that when consumers purchase the products, they are deemed to be buying a bundle comprising tangible property and prewritten software, itself characterized as tangible personal property. The sales and income tax issues with the sale of these products are fairly straightforward.

More challenging from a state and local tax perspective are the other uses of AI. An increasing number of businesses contract with AI providers to model business activity and report on information of value to the businesses. An AI provider can furnish various services in the nature of consulting by incorporating statistical concepts and methods into its software algorithms that act upon public or proprietary data sets, which are often massive and complex. As we discuss in the next sections, characterization of the AI services and their taxability for sales tax purposes requires a detailed review of the parties' contract, including the statement of work (SOW), the provider's promotional materials describing its services, and other materials.

Before we address characterization, we first highlight three examples of business-to-business AI technologies.

In situation 1, the AI provider develops a proprietary algorithm to predict the likelihood of a person contracting the COVID-19 virus. The AI provider grants users access to the software remotely through an application programming interface. The user answers demographic and behavioral questions, which the program compares with data collected from other users, as well as with Centers for Disease Control and Prevention reports of COVID-19 infection and contact-tracing data. The program then anonymizes the data that the user inputs. Users can neither download the software nor alter or control the algorithm. After completing the

questionnaire, the user receives an email with a simple prediction report.

In situation 2, the AI provider conducts end-to-end data analysis that includes data gathering, classification, processing, and presentation. The AI provider gathers the required input data from private and public sources. It applies its proprietary algorithm, statistical concepts, and other methods of analysis to large, complex data sets to solve difficult, non-routine problems. The AI provider produces an electronic report reflecting the insights, patterns, and trends reflected in the data set; performs quantitative analysis to create clear, actionable narratives related to user acquisition, conversion, and retention patterns; and translates the analysis into business and marketing observations and recommendations. In effect, an AI provider — in reliance on its model of customer behavior — reports on factors that trigger and otherwise influence customer purchases. Its customers — retailers — rely on the insights and advice to set pricing and marketing strategies and for product development. The agreement between the retailer and the AI provider stipulates that the retailer owns the report.

In situation 3, the AI provider partners with its customer to identify the customer's key metrics to design interactive, executive-facing dashboards to track the progress of the customer's highest priority initiatives in real time. The key objective for the AI provider is to generate and produce a visual storyboard that allows the customer to move from data to insights to decision-making immediately. The AI provider regularly updates the storyboard by email or chat with recommendations about future actions for its customers. The customers — sales and marketing professionals — rely on the real-time observations and recommendations to guide daily communication strategies.

In each situation, a state or local jurisdiction may seek to require the AI provider to collect and remit its sales or use tax, but neither the AI provider nor the database or application servers are located in that jurisdiction. The only connection to the jurisdiction is the customers. Thus, authorized users may access the provider's servers/software from the state or locality — or the provider may email and otherwise

³R.L. Adams, "10 Powerful Examples of Artificial Intelligence in Use Today," *Forbes*, Jan. 10, 2017; TechTarget Network, Artificial Intelligence (last visited Apr. 28, 2020).

electronically interact with employees or customers of the provider's customers in the state or locality.

State Sales and Use Tax Issues Regarding AI

Nexus is the threshold sales tax question for any seller, whether of tangible personal property or of services. Since the U.S. Supreme Court's landmark decision in *Wayfair*,⁴ almost every state that levies sales and use taxes has adopted economic nexus policies.⁵ In all but six of these states, the threshold is based on gross sales, regardless of whether the sales are taxable.⁶ So even if many of the services an AI provider sells are not taxable, the provider is technically required to register for sales tax purposes in most states if its gross sales exceed the threshold.

After a practitioner determines the jurisdictions where the AI provider has nexus, the next task is to understand and characterize the service or product offered.⁷ No state or local jurisdiction taxes artificial intelligence as such, but AI may be incorporated into taxable software or be deemed a taxable service. The analysis is complicated by the fact that aspects of the service may be taxable or the provider may use taxable items — software and computers — to provide the otherwise nontaxable service sought by the customer, resulting in a bundle of taxable and nontaxable components.

The practitioner must examine the transaction's true object⁸ or primary purpose⁹ to determine how the service should be properly characterized. The true object of the transaction is determined by analyzing the SOW, the invoices sent to the customer, and the client's marketing materials. Do these documents support an argument that the true object of the transaction is to secure nontaxable AI services?¹⁰ AI offerings may be characterized as software as a service (SaaS), an information service, data processing, consulting, or custom software, depending on the specifics of the product or service. We examine each of these tax categories in light of situations 1-3 described earlier.

Software as a Service

In each of our three situations, the provider uses software code to codify and use the algorithm it has developed. Only situation 1, however, can possibly be characterized as SaaS.

As is often the case with SaaS, the prewritten software in situation 1 is in the cloud. Is the customer's true object accessing remote prewritten software? The customer's use of the software in situation 1 is limited to keying in data to determine a result. Nevertheless, several state

⁸ See e.g., Tennessee Department of Revenue, LTR 16-12 (Dec. 16, 2016) (cloud-based storage databases and associated software-based services are not subject to tax because the true object was the provision of nontaxable data storage services); *Andersen Consulting LLP v. Gavin*, 767 A.2d 692 (Conn. 2001) (true object was taxable computer and data processing services rather than consulting services); Texas Comptroller, PLR20180724152951 (Mar. 3, 2020) ("In . . . situations where multiple taxable services are performed, the Comptroller looks at the overall circumstance to determine the service that the customer is 'primarily interested in.'")

⁹ See e.g., New York State Department of Taxation and Finance, Advisory Opinion TSB-M-10(7)S (July 19, 2010) ("whether a service qualifies as an information service depends on its primary function The Tax Department will determine a service's primary function based on an examination of the nature of the service being sold and what is being paid for by the purchaser.")

¹⁰ See Tennessee DOR, LTR 18-09 (Dec. 14, 2018) (charges for the license of a SaaS product are not taxable because the customer's true object is to acquire data analytics services, which are nontaxable data processing); see also N.Y. State Department of Tax. & Fin., TSB-A-10(14)S (Apr. 8, 2010) (the "primary function of Petitioner's integrated IT monitoring and management service is to assist a customer in the operation and management of its IT system. This activity is not among the enumerated services subject to sales or use tax."); *Matter of SSOV '81 Ltd.* (N.Y. Tax App. Trib. 1995).

⁴ *South Dakota v. Wayfair Inc.*, 138 S. Ct. 2080 (2018).

⁵ Florida and Missouri are the lone holdouts among states that levy a sales and use tax in the first instance.

⁶ The six states that measure economic nexus on taxable sales are Arkansas, Colorado, Illinois, Minnesota, Nebraska, and Oklahoma.

⁷ For a discussion of transaction taxes on IT services, see Martin Eisenstein and Michael Carey, "Transaction Taxes on Information Technologies: The Threat," *State Tax Notes*, Dec. 22, 2014, p. 689.

tax agencies would likely deem the service provided in situation 1 to be SaaS, since the customer accesses the prewritten software — which is owned or licensed by the provider and located on servers controlled by the provider — to input data and then receive a report.¹¹ For example, the Massachusetts Supreme Judicial Court recently concluded that charges for the Citrix GoToMeeting online product are taxable as a sale of prewritten computer software transferred electronically, even though there was no transfer of title or possession and the remote software required access to a network of servers (located outside Massachusetts) running proprietary software necessary for GoToMeeting to function.¹² The court found that the “true object” of those sales was to obtain access and the ability to use the online products and not to obtain a service, as Citrix argued.¹³

The New York State Department of Taxation and Finance issued a letter ruling (TSB-A-11(17)S) regarding an agreement in which the provider granted customers a license to use its remote software to send marketing messages to their customers.¹⁴ The licensees loaded data that they had collected from their own customers into the software and specified search criteria for a marketing campaign to create a list of targeted recipients and messages.¹⁵ The department found that the grant of the license to the software was taxable as the sale of a software product.¹⁶

¹¹ For example, the following states treat SaaS as taxable if users of the software are located there, even though they deem the transaction taxable as the sale or lease of tangible personal property — the prewritten software — and the software is located on servers in another state: Louisiana DOR Rul. 10-001 (2010); 830 CMR 64 H.1.3(14)(a); Miss. Admin. Code 35-IV-5.06; N.Y. State Department of Tax. & Fin., TSB-A-11(17)S (2011); Pennsylvania DOR, SUT-12-001 Cloud Computing (May 31, 2012); 44 R.I. Gen. Laws Ann. sections 44-18-7 (15), 44-18-7.1 (g)(vii); Tenn. Code Ann. section 67-6-231(a); Wash. Rev. Code Ann. section 82.04.050 (6)(c)(i); W.Va. Code section 11-15B-2(b)(42), (60). Other jurisdictions analyze SaaS as the lease of personal property, although the state or locality also sources the gross receipts based on where the users are. See Arizona DOR, Private Taxpayer Ruling LR 15-005 (2015); City of Chicago, Personal Property Lease Transaction Tax (7550).

¹² *Citrix Systems Inc. v. Massachusetts Commissioner of Revenue*, 484 Mass. 87, 139 N.E.3d 293, 294 (2020) (sales of subscriptions were taxable “transfers of rights to use software installed on a remote server”); see Mass. Gen. Laws c. 64H, sections 1, 2.

¹³ *Id.*

¹⁴ N.Y. State Department of Tax. & Fin., TSB-A-11(17)S (2011).

¹⁵ *Id.*

¹⁶ *Id.*

However, situation 1 is different from both *Citrix* and TSB-A-11(17)S in two ways. First, the customer in our situation 1 is not given a license to use the software. Second, and perhaps more importantly, the software that the customer accesses in situation 1 is a means to achieve the customer’s true purpose; namely, to obtain a prediction of whether she is infected with COVID-19. This prediction is generated from the application of the algorithm embedded in the software to the user’s data. In *Citrix*, the customer’s purpose was to use the software, and not to obtain information. The facts in TSB-A-11(17)S sit between these poles. While the software in TSB-A-11(17)S produces a product, a targeted list and message, its contents differ according to the customer’s data and criteria. Arguably, the product in TSB-A-11(17)S is similar to the product in situation 1. However, in situation 1 the customer does not have the license to use — and in fact does not use — the software.

Based on the true object principle, the service in situation 1 is arguably not SaaS, but rather an information or data processing service. As discussed later in this article, information and data processing services are taxable in fewer states than those that tax charges for SaaS.¹⁷

Consider a 2018 example from Tennessee, which taxes charges for SaaS as tangible personal property but does not tax “information or data processing services.”¹⁸ The taxpayer provided data analysis tools contained on software in the cloud, which it used to analyze customers’ usage data that the taxpayer collected through its mobile and web apps.¹⁹ The Tennessee Department of Revenue determined that the true object of the purchase by the taxpayer’s customers was to acquire data analytics services; the taxpayer’s

¹⁷ It is interesting to observe that several states analyze SaaS as taxable data processing. Conn. Gen. Stat. Ann. section 12-407(13); D.C. Code Ann. section 47-2001(n)(1)(N)(i); Ohio Department of Taxation, Opinion of the Tax Commissioner, No. 14-0001 (Feb. 4, 2014); Texas Comptroller, LTR 200805095L (May 28, 2008). Wisconsin characterizes SaaS as a nontaxable data processing service. Wisconsin DOR, Sales and Use Tax Treatment, Computer Hardware, Software, Services (Feb. 20, 2020). In South Carolina, charges for SaaS are generally taxable as a communications service, unless the charge is for data processing — in which case it is nontaxable. S.C. Code Ann. sections 12-36-910(B)(3), (C) 12-36-1310(B)(3); see also South Carolina DOR, Rev. Rul. 20-1 (Jan. 16, 2020).

¹⁸ Tennessee DOR, LTR 18-09 (Dec. 14, 2018); Tenn. Code Ann. section 67-6-231(a), (b).

¹⁹ *Id.*

provision of access to a web-based dashboard was merely incidental to the true object.²⁰ This letter ruling highlights the importance of examining the transaction's true object and not relying on superficial descriptions.

In a recent determination, the Texas Comptroller of Public Accounts found that a SaaS platform that accepted a client's raw customer data, organized it into customer profiles, and created databases structured and formatted for various advertising purposes was a taxable data processing service.²¹ Likewise, the New Mexico Taxation and Revenue Department found that a subscription to an online software program used to compile and analyze data and to generate economic forecasts was a license to use intangible property.²²

Information Services

Information services are generally defined as the furnishing of information to customers, including providing a right of access to a common database.²³ Classic examples of information services include credit reporting, insurance claims processing, and legal research databases.²⁴ Several states' information services provisions parallel those for data processing.²⁵

Some state laws limit the broad definitions of taxable information services. Florida's tax on information services exempts the electronic delivery of information.²⁶ Further, the laws of New Jersey, New York, Texas, and Florida include an exclusion from taxability for information that is "personal or individual" or "proprietary" and that may not be resold to a person other than for whom it was gathered.²⁷

The New York tax department, however, has attempted to narrow that state's personal information exclusion by determining that information obtained from a common database is not personal or individual in nature.²⁸ On the other hand, in a later case, *Westwood Pharmaceuticals*, the taxpayer successfully resisted the department's attempts to narrow the exclusion and impose a tax on the service provided by the company A.C. Nielsen.²⁹ The Appellate Division of the New York Supreme Court held that even though Nielsen provided reports to the taxpayer based on a publicly available data source, the taxpayer was entitled to the exemption because the data Nielsen

²⁰ *Id.*

²¹ Texas Comptroller, STAR System 201902014L (Feb. 22, 2019).

²² See, e.g., New Mexico Taxation and Revenue Department Rul. 401-13-1 (Jan. 2013).

²³ Information services are generally taxable in nine states plus the District of Columbia. D.C. Code Ann. section 47-2001(n)(1)(N); Fla. Admin. Code Ann. r. 12A-1.062(1); Iowa Code Ann. section 423.2(6)(br); N.J. Stat. Ann. section 54:32B-3; N.Y. Tax Law section 1105(c)(1); Ohio Admin. Code 5703-9-46(B); South Carolina DOR, Rev. Rul. 17-2, Mar. 10, 2017; Tex. Tax Code Ann. sections 151.0101(a), 151.351; Wash. Admin. Code 458-20-15503 (203)(a); W.Va. Code Ann. sections 11-15-2(b)(17), 11-15-3(b), 11-15-9h(a)(3) (sales of electronic data processing services are exempt).

Also, Hawaii, New Mexico, and South Dakota generally tax services. Haw. Rev. Stat. section 237-13(6); N.M. Stat. Ann. section 7-9-3.5(A)(1); S.D. Codified Laws sections 10-45-4.1, 10-45-4.5.

Pennsylvania has asserted that information retrieval products constitute tangible personal property and are taxable. Pennsylvania Department of Revenue, Legal Ltr. Rul. No. SUT-17-002 (2017).

²⁴ See, e.g., New Jersey Division of Taxation, Publication ANJ-29, Information Services & New Jersey Sales Tax, rev. Aug 2013; *ADP Automotive Claims Services Inc. v. Tax Appeals Tribunal*, 594 N.Y.S.2d 96 (N.Y. App. Div. 1993); Pennsylvania Department of Revenue, Legal Ltr. Rul. No. SUT-17-002 (2017).

²⁵ Cf. e.g., V.T.C.A., Tax Code 151.351, with 34 Tex. Admin. Code sections 3.330, 3.342.

²⁶ Fla. Technical Assistance Advisement No. 09A-049 (Sept. 2009).

²⁷ N.J. Admin. Code section 18:24-35.5; N.Y. Comp. Codes R. & Reg. section 527.3(b)(2); 34 Tex. Admin. Code section 3.342(5); see also Fla. Admin. Code Ann. r. 12A-1.062(3)(a) (including a similar exemption for information of a personal or individual nature).

²⁸ See N.Y. State Department of Tax. & Fin., Advisory Opinion TSB-M-10(7)S (2010) ("as a general rule, furnishing information created or generated from a common database, or information that is widely accessible, is a taxable information service."); accord *ADP Automotive Claims Services Inc. v. Tax Appeals Tribunal*, 594 N.Y.S.2d 96 (N.Y. App. Div. 1993) (a company did not provide personal or individual information services when it used a computer to calculate the costs of repairing an automobile after the customer entered information about the car and the damage it sustained, because the computer relied on data from a common database that was not confidential and was widely accessible.)

²⁹ *Westwood Pharmaceuticals Inc. v. Chu*, 164 A.D.2d 462, 466-67 (1990), *lv denied* 77 N.Y.2d 807 (1991).

provided were tailored to the specific requirements of the taxpayer and not provided to any other Nielsen customer.³⁰

Last year, in *Wegman's*, the Court of Appeals of New York considered the effect of publicly available information on the personal or individual exclusion.³¹ The supermarket chain hired a vendor to monitor its competitors' prices by sending employees into competitors' stores to manually scan their prices.³² The court found that competitors' supermarket shelves are a nonconfidential and widely accessible source.³³ A dissenting opinion conducted a detailed statutory analysis, finding that the "legislative history . . . makes the meaning of the personal or individual exclusion clear: 'personal or individual' was meant to distinguish generic information services from customized ones."³⁴ The dissenting justice called into question the department's common database doctrine:

A business that collected raw data from a common source that is not confidential and is widely accessible but that was nonetheless created and validated only in response to a client's specific request is engaging in the furnishing of information which is personal or individual in nature, so long as that request does not result in a

standardized product that is sold to others.³⁵

Wegman's is significant because it was decided by New York's highest court, but the case's facts are distinguishable from many AI applications. The only service provided by the vendor to *Wegman's* was to manually collect and validate the information, and create and furnish reports from the data³⁶ — a far cry from the services often seen in an AI provider's SOW. *Westwood* is still good law, as *Wegman's* contains only a passing mention to the case in a concurrence. Most importantly, the services provided by Nielsen, *Westwood's* AI provider, were far different than the services received by *Wegman's*. The report that Nielsen provided to its customer was based on more than one data source and tailored to the special circumstances of *Westwood*.

A practitioner must understand the client's business and the type of services it provides to its customers to make a strong primary purpose argument. According to New York tax department policy, the "fact that one element of a service is an information service does not mean that the service as a whole is taxable as an information service."³⁷ The New York Tax Appeals Tribunal, for example, found that a matchmaking service was not a taxable information service because its primary function was to "allow members to meet others," even though the taxpayer provided information to users as a byproduct.³⁸ Similarly, the Tennessee Court of Appeals found that a program that furnished tax information, computer services, and conversion services was a nontaxable information service because the purchaser's primary object

³⁰The *Westwood* court reasoned: The reports do not provide the same general information to several subscribers or to a particular class of subscribers. The raw data is not compiled from one general source. Indeed, much of the raw data is provided by the individual client. Most importantly, however, the information distributed to *Westwood* [is from a] separate data base that is used only for the preparation of *Westwood's* report. It is not a common data base, and the [separate database] is never disclosed to any client. A separate computer program is designed to meet the unique specifications of each client, and the information generated by this program is provided in the strictest confidence to the client and is never included in market reports furnished to other clients. Because the "sample frame" data and information distributed are unique to each client, the Nielsen services and reports are individual in nature . . . and the information cannot be substantially incorporated into reports furnished to other persons.

Id.

³¹*Wegman's Food Markets Inc. v. Tax Appeals Tribunal*, 33 N.Y.3d 587, 595, 131 N.E.3d 876, 881 (2019).

³²*Id.*

³³*Id.* ("there is nothing about the information itself that is personal or individual in nature"). The court held that in construing "statutory exclusions, the presumption is in favor of the taxing power." *Id.* (citing *Matter of Mobil Oil Corp. v. Finance Administrator of the City of New York*, 58 N.Y.2d at 99, 459 N.Y.S.2d 566, 446 N.E.2d 130 (1983)).

³⁴*Id.*, 33 N.Y.3d at 612, 131 N.E.3d at 894 (Wilson, J., dissenting).

³⁵*Id.*

³⁶*Id.*, 33 N.Y.3d at 590, 131 N.E.3d at 877.

³⁷N.Y. State Department of Tax. & Fin., Advisory Opinion TSB-M-10(7)S (July 19, 2010). It continues: The Tax Department will determine a service's primary function based on an examination of the nature of the service being sold and what is being paid for by the purchaser. How the buyer subsequently uses the information purchased is not relevant to this inquiry. If a customer's chief purpose in paying for a service is to receive information from that service, whether it is the price of a stock, the chain of ownership of real property, or contact information for a person meeting certain qualifications, the service as a whole qualifies as an information service. This result holds true even if the customer receives other benefits as part of the service.

³⁸*Matter of SSOV '81 Ltd.* (N.Y. Tax App. Trib., Jan. 19, 1995).

was to obtain access to the provider's website and obtain information from the internet.³⁹

A thorough analysis of the primary purpose of a transaction is especially important because AI providers market their services as yielding unique insights from large data sets. The fact that one component of the data set may be a "common database" likely has little bearing on the AI provider's skill and expertise, which is likely the customers' primary purpose in contracting for the services. The risk, of course, is that an auditor may look narrowly through the lens of the state's tax code and mistakenly characterize AI services as just another information service. For example, the Texas Comptroller of Public Accounts recently found that a recruiting marketplace that matched jobseekers with employers "using artificial intelligence technology" was providing a taxable information service.⁴⁰ Practitioners should make strong, clear arguments to simplify this relatively new technology; AI provides new insights and ways to analyze information. The practitioner should not fall into the facile trap that new technology is simply not taxable under statutes that predate it.⁴¹

If the primary purpose of the transaction in situation 1 is an information service, taxability turns on where the report was received. Since the user receives the report electronically, it would not be taxable if received in Florida. The report is tailored to the individual's personal data and, because the data are anonymized, other persons may not download the report. Therefore, the charges should not be taxable in New Jersey and Texas. What remains as an open question in New York is whether the basis for the report is the algorithm or a common database. On the basis of *Westwood*, the service is arguably not taxable.

Situation 2 is most likely characterized as an information service because the report reflects the patterns and trends of the data set. Since the

report is received electronically, Florida would not tax the charges. The report is personal and individual in nature, because it is tailored to the unique needs of the retailer, rendering situation 2 likely not taxable in New Jersey and Texas. The taxability of the report in New York turns on an analysis based on the *Wegman's* and *Westwood* decisions. The AI provider in situation 2 enhances the data to a much greater degree than did the vendor in *Wegman's* but also draws data from multiple sources. Arguably, as in *Westwood*, the common database is an ancillary component to the customer's own data, which form the primary basis for the narratives related to user acquisition, conversion, and retention patterns. Also, information services are only one component of the service, as discussed below, so that an argument that the primary purpose is a nontaxable AI service may gain traction. The argument is that the provider's advice — through its algorithm and specialized services — is the true object of the transaction.

Data Processing

We noted earlier that many states analyze information services and data processing similarly,⁴² but there are a number of important differences.⁴³ Data processing is the service of compiling information and producing records of transactions, maintaining and storing

⁴²See, e.g., Iowa Code Ann. section 423.1 (22A) ("Information services' means delivering or providing access to databases or subscriptions to information through any tangible or electronic medium. 'Information services' includes but is not limited to database files, research databases, genealogical information, and other similar information"); Ohio Rev. Code section 5739.01(B)(3)(e) (the term "sale" includes all transactions by which "Automatic data processing, computer services, or electronic information services are or are to be provided for use in business when the true object of the transaction is the receipt by the consumer of automatic data processing, computer services, or electronic information services rather than the receipt of personal or professional services to which automatic data processing, computer services, or electronic information services are incidental or supplemental.")

⁴³Charges for data processing are taxable in nine states and the District of Columbia. Conn. Gen. Stat. Ann section 12-408(1)(D)(i) (charges are taxed at a 1 percent rate); D.C. Mun. Regs. tit. 9 section 474.1; Haw. Rev. Stat. section 237-13(6)(A); Fla. Admin. Code Ann. r. 12A-1.032(2), (3) (taxable if servers are located in state); Iowa Code Ann. section 423.2(6); Kansas DOR Rev. Sales Tax Guidelines, July 23, 2010 (EDU-71R) (taxable if servers are located in state); N.M. Stat. Ann. section 7-9-3.5(A)(1) (taxable if servers are located in state); Ohio R.C. section 5739.01(B)(3)(e); S.D. Codified Laws sections 10-45-4; V.T.C.A., Tax Code section 151.0101(a)(12). Chicago taxes data processing charges, sourced by use to the city, at 7.25 percent under its personal property lease transaction tax. Chicago Personal Property Lease Transaction Tax (7550).

³⁹*Prodigy Services Corp. v. Johnson*, 125 S.W.3d 413 (Tenn. Ct. App. 2003).

⁴⁰Texas Comptroller, STAR System 202003011L (March 2, 2020).

⁴¹See *Prodigy Services Corp.*, 125 S.W.3d at 417 ("We think it is too easy to say that an invention not in use when the statute was passed cannot have been within the intent of the legislature. *Prater v. Reichman*, 135 Tenn. 485, 187 S.W. 305 (1916) has been cited for that proposition, but we note that the court went on to say that the article in question was 'so entirely dissimilar in kind from any of the articles mentioned in our exemption statutes that it cannot be held to be embraced therein.'")

information, or entering and retrieving information.⁴⁴ Information services, in contrast, aggregate data into meaningful information to provide to the customer,⁴⁵ which the New York Department of Finance has described as the addition of intelligence or analysis to the mere processing or recasting of information.⁴⁶

An example of the distinction between the two services can be found in two New York decisions. In one letter ruling issued to a rail car payment processing vendor, the tax agency found that the vendor performed a nontaxable data processing service because it changed the format of information purchased from a third-party intermediary, and then conveyed that information to the customer.⁴⁷ This constituted data processing, even though the provider was aggregating data to provide its customers with information about market rates for railroad cars.⁴⁸ In another ruling, New York found that a company that processes data provided by

telecommunications companies to create individual customer bills was not performing a taxable information service.⁴⁹

In addition to gathering information, AI providers often process and manipulate the data. For example, when it gathers, processes, and classifies data, the AI provider in situation 2 is likely performing a data processing service. However, the AI provider in that situation also analyzes the data to identify patterns and solve problems. In that sense it is much more likely to be deemed an information service than data processing.

States differ in how they approach information services and data processing. New York, New Jersey, South Carolina, Washington, and West Virginia tax sales of information services but not sales of data processing. On the other hand, Connecticut (at a 1 percent rate) and Kansas tax sales of data processing but not information services. The differences between information services and data processing can be traps for the unwary, but offer opportunities for the astute practitioner, including by recommending unbundling the services into taxable and nontaxable services.

Consulting and Custom Software Development

The fourth category of services that may encompass AI includes consulting and custom software development. We analyze these services together because the line between the two — as it relates to AI in particular — may be fuzzy. Business or management consulting is the provision of advice or assistance to an organization involving the sale of its products, property, goods, or services to others; its capital structure; its budget; or its short-range, long-range, or strategic plans.⁵⁰ Computer consultants provide a technical or advisory service by aiding their customer in determining its IT system needs, performs feasibility studies, provides system design and architecture, or provides project

⁴⁴ See e.g., Ohio Rev. Code section 5739.01(Y)(1)(a) (“Automatic data processing” means processing of others’ data, including keypunching or similar data entry services together with verification thereof, or providing access to computer equipment for the purpose of processing data”); 34 Tex. Admin. Code section 3.342(a) (data processing services are defined to be “processing, reformatting, or manipulating data provided by the customer”).

⁴⁵ Compare, e.g., D.C. Code Ann. section 47-2001(n)(1)(N)(ii) (the term “information service” means the “furnishing of general or specialized news or current information”) with *id.*(i) (the term “data processing service” means the “processing of information for the compilation and production of records of transactions; the maintenance, input, and retrieval of information,” among other services); cf. 34 Tex. Admin. Code section 3.342(a)(2) (information services is defined as the “furnishing general or specialized news or other current information”) with *id.*(1)(data processing services are defined to be “processing, reformatting, or manipulating data provided by the customer”). See Texas Comptroller, PLR20180724152951 (Mar. 3, 2020).

⁴⁶ N.Y. State Department of Tax. & Fin., TSB-A-13(24)S (Sep. 9, 2013) (Petitioner’s service is “an information service because it includes analyzing and compiling customer information. Petitioner’s service does more than merely recast or reformat the Customer’s information. For example, Petitioner validates the information, converts it into a data file suitable for submission to CMS and returns data which needs additional work. This analysis adds to ‘intelligence’ contained in the original documents, and therefore constitutes an information service.”). *Matter of SSOV ’81 Ltd.* (N.Y. Tax App. Trib. 1995) (information services means “the sale of the service of furnishing information by a business whose function it is to collect and disseminate information which is taxable under Tax Law [section] 1105(c)(1) and not the mere sale of information.”).

⁴⁷ N.Y. State Department of Tax. & Fin. Advisory Opinion TSB-A-10(52)S (Oct. 18, 2010).

⁴⁸ *Id.*

⁴⁹ N.Y. State Department of Tax. & Fin. Advisory Opinion TSB-A-98(57)S (Aug. 6, 1998).

⁵⁰ See Conn. Agencies regs. 12-407(2)(i)(J)-1. Only five states tax consulting directly related to the customer’s core business activities. Conn. Agencies regs. Section 12-407(2)(i)(J)-1; Haw. Rev. Stat. section 237-13(6)(A); N.M. Stat. Ann. section 7-9-3.5(A)(1); S.D. Codified Laws sections 10-45-4; W.Va. Code section 11-15-2(b)(16)(17).

supervision of an IT systems installation or change.⁵¹ Custom software is software code that is specifically developed to the particular requirements or specifications of the customer.⁵² These definitions sound distinct but the devil is in the details and, as with the other sales tax categories discussed earlier, they require a very close review of the SOW. To demonstrate the detailed analysis required, we return to situations 2 and 3.

The provider's conclusions and recommendations in situation 2 arguably are business consulting services, as the customer's true object is to obtain the advice on product pricing, marketing, and product development. As described above, by performing quantitative analysis through the application of its proprietary algorithm and other methods of analysis to data, the AI provider:

- produces an electronic report reflecting the patterns and trends reflected in the data set;
- creates clear, actionable narratives related to user acquisition, conversion, and retention patterns; and
- translates the analysis into business and marketing observations and recommendations.

These services, though performed electronically, can be viewed as advice and assistance regarding the sale of products (as opposed to information services or data processing services), and if characterized as such would be taxed in just five states.

Situation 3, on the other hand, includes elements of business consulting, computer consulting, and custom software development. In that situation, the AI provider begins the engagement with by analyzing the processes or demands of the business to identify key metrics,

which is likely to be deemed business consulting. The AI provider also furnishes computer consulting, inasmuch as it designs an interactive dashboard that will track the customer's progress on the key metrics. Depending on the specifics of the SOW, the creation of the visual storyboard could also be characterized as the development and license of custom software, the upgrade of custom or canned software, or even the sale of prewritten software.⁵³

As we see in situation 3, the description of AI services contained in a SOW may cause the service to be characterized as business consulting, computer consulting, or the license of custom software. Depending on the sourcing of the service,⁵⁴ it is important to identify the primary purpose of an AI contract and to develop the argument that the services are not characterized as information services, data processing, or SaaS, but rather as this fourth category of consulting services or custom software development, since fewer states tax these services.⁵⁵

Conclusion

As this article illustrates, each of the three situations could be characterized as multiple different IT services. The practitioner must closely evaluate the SOW and gain an in-depth understanding of the customer's goal in purchasing AI services and the geographic

⁵¹In addition to the states that tax business or management consulting, Ohio and Tennessee tax computer consulting. Ohio Admin. Code 5703-9-46(B)(1); Tennessee DOR, LTR 00-34, Oct. 3, 2000 (taxable unless the consulting services are not at all associated with the production of software.) However, unlike business consulting, Connecticut taxes consulting services related to computer and data processing services at a reduced rate of 1 percent. Conn. Gen. Stat. section 12-408(1)(D)(i). Connecticut Department of Revenue Services Policy Statement 2006(8) (Mar. 23, 2007).

⁵²See e.g., S.C. Code Ann. Regs. section 117-330 ("Custom programs are programs prepared to the special order of a customer, the gross proceeds therefrom being subject to the tax").

⁵³Thirteen states and the District of Columbia tax the sale of custom software licenses. Ala. Admin. Code r. 810-6-1-.37(5) (custom software is taxable if licensed to the customer); Conn. Gen. Stat. Ann section 12-408(1)(D)(i); D.C. Mun. Regs. tit. 9, section 474(4); Haw. Rev. Stat. section 237-13; Iowa DOR, Taxation of Specified Digital Products, Software, and Related Services; Miss. Admin. Code 35-IV-5.06(200); Nebraska DOR, Sales and Use Tax Guide for Computer Software Information Guide (updated Jan. 21, 2014); N.M. Admin. Code 3.2.1 (18)(DD)(1); Ohio Admin. Code 5703-9-46(A)(2) (writing "system software" is taxable); S.C. Code Ann. Regs. section 117-330; S.D. Admin. R. 64:06:02:78; T.C.A. section 67-6-231(a); V.T.C.A., Tax Code section 151.009 (though exempt from tax if the software was created from scratch); W.Va. Code section 11-15B-2(b)(48)(B). Also, Wyoming also taxes sales of the service of upgrading custom or canned software. See Wyo. Stat. Ann. section 39-15-103(a)(i)(J).

⁵⁴For a discussion of sourcing information technology and cloud services, such as data processing, computer consulting, SaaS, and IaaS, for sales tax purposes, see Eisenstein and Carey, "Where's Waldo: Sourcing IT and Cloud Services," *State Tax Notes*, Aug. 8, 2016, p. 429.

⁵⁵See e.g., Texas Comptroller, LTR 201806033L (Jun. 28, 2018) (consulting services to improve call tracking and sales process are not taxable though they are bundled with services characterized as data processing because the essence of the transaction is purchasing consulting services); but see e.g., Texas Comptroller, LTR 201709026L (Sep. 25, 2017) (data processing services include optional, separately stated consulting services sold incidental with a SaaS product.)

sourcing of the billing to determine the best characterization, and whether some services should be unbundled in the invoicing. The analysis is no less complicated for income taxes, which we will discuss in next month's column as Part II of this series on AI.

State and local transaction tax laws have not kept pace with the rapid evolution of AI technology and its applications. AI providers and their tax advisers must think creatively about how to apply existing tax laws to situations not contemplated when those laws were written. Speaking of which, "Alexa, is AI taxable?" ■

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