AB 13 (Chau)
Version: June 24, 2021
Hearing Date: July 13, 2021
Fiscal: Yes
Urgency: No
JT

SUBJECT

Public contracts: automated decision systems

DIGEST

This bill would establish the Automated Decision Systems (ADS) Accountability Act, which, in the context of the State's procurement policies, promotes oversight over ADS that pose a high risk of adverse impacts on individual rights.

EXECUTIVE SUMMARY

ADS are algorithm-driven applications that can assist or supplant human decisionmaking processes in areas such credit decisions, employment screening, insurance eligibility, and the delivery of government services. ADS process enormous datasets and make decisions with speed and reliability that vastly exceed human capabilities. However, poorly designed or poorly understood systems can create unfair, biased, and inaccurate results. When deployed by government agencies, flawed ADS may disproportionately harm low-income families and communities of color and undermine trust in the public sector. Moreover, norms of participatory governance and due process may be jeopardized when ADS affect agency policymaking, adjudications, or enforcement.

The bill seeks to promote the oversight of algorithmic decisionmaking in the context of the State's procurement policies. The author argues that instead of just treating purchases as normal government contracting decisions—which focus on bidding, competition, and value—government agencies should additionally scrutinize the risks that these systems may pose to individual rights. In broad strokes, the bill:
- requires the California Department of Technology (CDT) to establish guidelines identifying ADS with a high-risk of adverse impacts;
- requires the CDT to take an inventory of state agencies' high-risk ADS, and submit a report to the Legislature;

- encourages bidders for state procurement of ADS to submit impact assessment reports for ADS procured after January 1, 2023; and
- allows the CDT to post on its website impact assessment reports of contract awardees, but prohibits the disclosure of trade secrets, proprietary information, and intellectual property.

The bill is sponsored by the Greenlining Institute and supported by civil rights and consumer protection advocates. The bill is opposed by a coalition of organizations that includes the California Chamber of Commerce, the Internet Association, and TechNet. It passed the Senate Governmental Organization Committee by a vote of 8-3. Amendments are described on page 18.

PROPOSED CHANGES TO THE LAW

Existing law:

1) Establishes the State Contract Act, which prescribes certain standards and procedures governing the process of soliciting and awarding contracts for state procurement of goods and services, and, among other things, specifies that whenever provision is made by law for any project that is not under the jurisdiction of specified agencies is under the sole charge and direct control of the Department of General Services (DGS). (Pub. Con. Code § 10100 et seq.; 10107.)

2) Specifies that, on the day named in a public notice advertising a state contract, the contracting department must publicly open the sealed bids and award the contracts to the lowest responsible bidders. (Pub. Con. Code § 10180.)

3) Establishes, within the Government Operations Agency, the CDT, and generally tasks the department with the approval and oversight of information technology (IT) projects, and with improving the governance and implementation of IT by standardizing reporting relationships, roles, and responsibilities for setting IT priorities. (Gov. Code § 11545, et seq.)

4) Expresses the intent of the Legislature that policies and procedures developed by CDT and DGS pertaining to the acquisition of IT goods and services provide for all of the following: the expeditious and value-effective acquisition of IT goods and services to satisfy state requirements; the acquisition of IT goods and services within a competitive framework; the delegation of authority by DGS to each state agency that has demonstrated to DGS's satisfaction the ability to conduct value-effective IT goods and services acquisitions; the exclusion from the state bid process of any supplier having failed to meet prior contractual agreements related to IT goods and services; and the review and resolution of protests submitted by any bidders with respect to any IT goods and services acquisitions. (Pub. Con. Code § 12101.)

5) Requires that contract awards for all large-scale systems integration projects be based on the proposal that provides the most value-effective solution to the state's requirements, as determined by the evaluation criteria contained in the solicitation document, and provides that evaluation criteria for the acquisition of IT goods and services, including systems integration, shall provide for the selection of a contractor on an objective basis not limited to cost alone. (Pub. Con. Code § 12102.2(a).)

6) Provides that "value-effective acquisition," for the purposes of state IT acquisition, may be defined to include all of the following: the operational cost the state would incur if the bid or proposal is accepted; the quality of the product or service, or its technical competency; the reliability of delivery and implementation schedules; the maximum facilitation of data exchange and systems integration; warranties, guarantees, and return policy; supplier financial stability; consistency of the proposed solution with the state's planning documents and announced strategic program direction; the quality and effectiveness of the business solution and approach; industry and program experience; the prior record of supplier performance; supplier expertise with engagements of similar scope and complexity; the extent and quality of the proposed participation and acceptance by all user groups; proven development methodologies and tools; and innovative use of current technologies and quality results. (Pub. Con. Code § 12100.7(e).)

7) Provides, pursuant to the Unruh Civil Rights Act, that all persons within the jurisdiction of this state are free and equal, and no matter what their sex, race, color, religion, ancestry, national origin, disability, medical condition, genetic information, marital status, sexual orientation, citizenship, primary language, or immigration status are entitled to the full and equal accommodations, advantages, facilities, privileges, or services in all business establishments of every kind whatsoever. (Civ. Code § 51.)

This bill:

1) Establishes the Automated Decision Systems Accountability Act. States the intent of the Legislature that agencies of the state use an acquisition method that minimizes the risk of adverse and discriminatory impacts resulting from the design and application of ADS.

2) Defines:
   a) "Automated decision system" as a computational process, including one derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues simplified output, including a score, classification, or recommendation, that is used to support or replace human decisionmaking and materially impacts natural persons.
   b) "High-risk application" as a use of an ADS for which any of the following apply:

        i. Poses a significant risk to the privacy or security of personal information or is likely to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons, taking into account the novelty of the technology used and the nature, scope, context, and purpose of the ADS.

        ii. Affects the legal rights, health and well-being, or economic, property, or employment interests of a natural person.

        iii. Involves the personal information of a significant number of individuals with regard to race, color, national origin, political opinions, religion, trade union membership, genetic data, biometric data, health, gender, gender identity, sexuality, sexual orientation, criminal record, or any other characteristic identified in the Unruh Civil Rights Act (Section 51 of the Civil Code).

        iv. Meets any other criteria established by the CDT via regulations.

    c) "Simplified output" means output composed of fewer dimensions than the respective inputs used to generate it.

3) Requires, on or before January 1, 2023, the CDT, in consultation with the DGS and with stakeholder input, to establish and make public guidelines for identifying ADS in a manner generally consistent, if appropriate, with international high-risk frameworks and standards.

4) Requires, on or before June 30, 2023, the CDT to conduct a comprehensive inventory of all high-risk ADS that have been proposed for, or are being used, developed, or procured by, state agencies. The CDT must submit a report of the comprehensive inventory to the Legislature by July 31, 2023.

5) Requires, beginning January 1, 2023, the CDT or any other state agency seeking to award a contract for goods or services that includes the use, licensing, or development of an ADS for a high-risk application to encourage a bid response submitted by a prospective contractor to include an ADS impact assessment report that makes the following disclosures to the contracting agency:

    a) Specify the name, vendor, and version of the ADS and describe its general capabilities, including, but not limited to, reasonably foreseeable capabilities outside the scope of its proposed use.

    b) Describe the purpose of the ADS, including, but not limited to, the decision or decisions it can make or support, and its intended benefits compared to alternatives, including, but not limited to, the results of any research assessing its efficacy and relative benefits.

    c) Provide a thorough explanation of how the ADS functions, the logical relationship between data inputs and outputs, and how those outputs relate to the decision or decisions made or supported by the system, including, but not limited to, limitations on inferences that can be drawn from those results.

d) Describe the affirmative steps the prospective contractor has taken, or any third-party engagement, to conduct legitimate, independent, and reasonable tests of the ADS to help assess any risks posed to the privacy or security of personal information and any risks that may result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons.

e) Describe any potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act from the proposed use of the ADS, including, but not limited to, reasonably foreseeable capabilities outside the scope of its proposed use.

f) Describe any internal policies the prospective contractor has adopted for identifying potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act resulting from the proposed use of the ADS.

g) Provide best practices for the proposed high-risk application of the ADS to avoid or minimize any disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act, including all of the following:

    i. How and when the ADS should be deployed or used, and the relevant technical expertise necessary to minimize the potential for inaccurate, unfair, biased, or discriminatory decisions impacting natural persons.

    ii. How to limit the collection and retention of information to that which is directly relevant and necessary for the specified purpose.

    iii. How ADS data should be stored and accessed to mitigate security risks and threats.

    iv. Any additional information specified in the solicitation, or otherwise required by the contracting agency for the purpose of effectively evaluating and avoiding or minimizing disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act from the use of the ADS.

    v. Any additional information required in accordance with regulations adopted by the CDT.

6) Requires, on and after January 1, 2023, a state agency that awards a contract for goods or services that includes the use, licensing, or development of an ADS for a high-risk application shall, within 30 days of awarding that contract, submit to the CDT a copy of the ADS impact assessment report, if any, included in the bid response that also includes a clear and understandable statement of the following:

a) The extent to which members of the public have access to the results of the ADS, including an explanation for the basis of a resulting decision in terms understandable to a layperson, and are able to correct or object to its results, and where and how that information will be made available and any applicable procedures for initiating corrections or objections, as appropriate.

   b) Any other information the CDT determines to be reasonably necessary to carry out the provisions of the bill.

7) Within 30 days of a state agency's submission of an ADS impact assessment report, the CDT may publish the report on its website. However, this does not require the publication of trade secrets. If a prospective contractor or third-party vendor discloses any proprietary information or intellectual property to the CDT, the proprietary information or intellectual property must be kept strictly confidential and shall not be subject to public disclosure.

8) Provides that, or before January 1, 2023, the CDT must develop a sample ADS impact assessment report for prospective contractors and may adopt regulations and publish guidelines as necessary to effectuate the purposes of the bill and must do so in a manner consistent, where possible, with international high-risk frameworks and impact assessment requirements.

COMMENTS

1. Author's statement

The author writes:

> Existing California law protects and safeguards the rights of all persons in a variety of contexts against discrimination, harassment and retaliation on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status sex, gender, gender identity, gender expression, age, sexual orientation, or military and veteran status.
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> According to a 2019 report by The Brookings Institution's Artificial Intelligence and Emerging Technology Initiative, "algorithmic or automated decision systems use data and statistical analyses to classify people and assess their eligibility for a benefit or penalty." The application of these systems assists with credit decisions, employment screening, insurance eligibility, and marketing, as well as the delivery of government services, criminal justice sentencing and probation decisions. In fact, there is a growing interest by the public sector to increase its uses of algorithmic or automated decision systems to improve operations and serve the needs of citizens. However, poorly designed algorithmic or automated decision systems can create unfair, biased and inaccurate results, causing disproportionate harm to some communities, while also undermining trust in the public sector.
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> The state has a legitimate and substantial interest in ensuring that "high-risk" automated decision-making systems, procured and used by

government, do not result in discrimination. It is therefore necessary to establish a process to review algorithmic decision systems in order to account for impacts on accuracy, fairness, bias, discrimination, privacy, and security. Doing so, will help to mitigate the potential negative impacts of these systems, especially in relation to protected-classes.

2. <u>Background</u>

    a. *Algorithmic bias*

Owing to recent advances in processing power and the rise of big data, artificial intelligence's capacity and the scope of its applications have expanded rapidly, impacting how we communicate, interact, entertain ourselves, travel, transact, and consume media. In ways we may not fully comprehend, artificial intelligence empowers and encumbers us. It has been used to accelerate productivity, achieve efficiencies, liberate us from drudgery, help us understand and enjoy the world, connect with each other, and live longer, fuller lives. It has also been used to constrain personal autonomy, compromise privacy and security, foment social upheaval, exacerbate inequality, spread misinformation, and subvert democracy. For good or ill, its transformative potential seems boundless.

The rapid proliferation of algorithm-driven applications reflects advances in a subset of artificial intelligence known as "machine learning," a technique that "aims to help computers discover fuzzy rules by themselves, without having to be explicitly instructed every step of the way by human programmers."[1] Machine learning "enables computer systems to learn and make predictions based on historical data. The machine learning process is powered by a machine learning algorithm, a function that is able to improve its performance over time by training itself using methods of data analysis and analytical modelling."[2] The most prominent type of machine learning is "deep learning," which "uses artificial neural networks – simplified computer simulations of how biological neurons behave—to extract rules and patterns from sets of data."[3]

Algorithms process enormous datasets and make decisions with speed and reliability that vastly exceed human capabilities. "They determine everything from what ads we see on the Internet, to whether we are flagged for increased security screening at the airport, to our medical diagnoses and credit scores. They lie behind two of the most powerful products of the digital information age: Google Search and Facebook's

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[1] *How machine learning works* (May 14, 2015) The Economist, https://www.economist.com/the-economist-explains/2015/05/13/how-machine-learning-works.
[2] *Intro to AI for Policymakers: Understanding the Shift* (March 2018) Brookfield Institute, http://brookfieldinstitute.ca/research-analysis/intro-to-ai-for-policymakers/.
[3] *How machine learning works, supra,* fn. 1.

Newsfeed."[4] The most sophisticated algorithms need no supervision and use deep neural networks to "discover hidden patterns in data, typically those unrecognizable to, or difficult to discern by, humans."[5] In addition to organizing vast troves of data, algorithms offer the possibility of eliminating human biases in areas such as hiring decisions, credit scores, and criminal sentencing.

However, an algorithm is only as good as the information it is analyzing. Flawed inputs will produce flawed outputs. And an algorithm may key in on factors other than those intended by its designer. In one example, a software student was dismayed to learn his program that could reliably distinguish dogs from wolves had, in actuality, learned to recognize snow in the background of the pictures rather than the canine's features.[6] When we do not fully understand how an algorithm works, we are unable to determine which aspects of data it is focusing on.

And in many cases algorithms may inadvertently pick up human biases. In *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*, Cathy O'Neill shows that ultimately, a person shapes an algorithm, mediating the datasets gathered and deciding how to weigh them. These decisions are colored by our inherent biases and cultural predilections. Jacob Weisberg writes that "[c]orrelations reflected in historical data become invisibly entrenched in policy without programmers having ill intentions. Quantified information naturally points backward."[7] Rather than eliminating bias, some algorithms reinforce it, cloaking discrimination with mathematical neutrality.

ProPublica recently explored this phenomenon in the field of criminal justice.[8] Some jurisdictions factor algorithm-driven risk assessments into criminal bail, sentencing, and parole decisions. In 2014, U.S. Attorney General Eric Holder warned that the risk scores might be injecting bias into the courts. "Although these measures were crafted with the best of intentions, I am concerned that they inadvertently undermine our efforts to ensure individualized and equal justice," he stated, adding, "they may exacerbate unwarranted and unjust disparities that are already far too common in our criminal justice system and in our society." After obtaining the risk scores assigned to more than 7,000 people arrested in Broward County, Florida, ProPublica found that the scores "proved remarkably unreliable in forecasting violent crime." ProPublica's study validated Holder's fears: "Black defendants were still 77 percent more likely to be

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[4] Jacob Weisberg, *The Digital Poorhouse* (June 7, 2018) The New York Review of Books, https://www.nybooks.com/articles/2018/06/07/algorithms-digital-poorhouse/.

[5] *AI for Policymakers*, *supra*, fn. 2 at p. 5.

[6] *Husky or Wolf? Using a Black Box Learning Model to Avoid Adoption Errors* (August 24, 2017) UCI Applied Innovation, http://innovation.uci.edu/2017/08/husky-or-wolf-using-a-black-box-learning-model-to-avoid-adoption-errors/.

[7] *The Digital Poorhouse*, *supra*, fn. 4.

[8] Angwin, et al., *Machine Bias* (2016) ProPublica, https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing.

pegged as at higher risk of committing a future violent crime and 45 percent more likely to be predicted to commit a future crime of any kind."

A lack of transparency reduces accountability, again underscoring the importance of oversight. "[A]lgorithms simply grind out their results, and it is up to humans to review and address how that data is presented to users, to ensure the proper context and application of that data."[9] New York University School of Law Professor Sarah Valentine puts a finer point on it: "Helpful as algorithms may be, they inevitably target marginalized populations and exacerbate the social stratification and vast inequality that already exists in our society."[10]

Illustrating this dynamic in the field of education, Meredith Broussard, a data journalism professor at New York University and author of "Artificial Unintelligence: How Computers Misunderstand the World," wrote an op-ed piece in the *New York Times* detailing how "the International Baccalaureate—a global program that awards prestigious diplomas to high school students—canceled its usual in-person exams because of the [COVID-19] pandemic" and instead "used an algorithm to 'predict' student grades based on an array of student information, including teacher-estimated grades and past performance by students in each school."[11] Tens of thousands of students, surprised to find out they failed, protested the results. "High-achieving, low-income students were hit particularly hard: many took the exams expecting to earn college credit with their scores and save thousands of dollars on tuition."[12]

Coining the term "technochauvinism"—the idea that technological solutions are almost always superior to ordinary human decisionmaking—Broussard writes:

> Computers are excellent at doing math, but education is not math — it's a social system. And algorithmic systems repeatedly fail at making social decisions. Algorithms can't monitor or detect hate speech, they can't replace social workers in public assistance programs, they can't predict crime, they can't determine which job applicants are more suited than others, they can't do effective facial recognition, and they can't grade essays or replace teachers.
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> In the case of the International Baccalaureate program, grades could have been assigned based on the sample materials that students had already submitted by the time schools shut down. Instead, the organization

[9] Keith Kirkpatrick, *Battling Algorithmic Bias* (2016) Communications of the ACM Vol. 59, No. 10, pp. 16-17, https://cacm.acm.org/magazines/2016/10/207759-battlingalgorithmic-bias/abstract.
[10] *Artificial Intelligence and Predictive Algorithms: Why Big Data Can Lead to Big Problems* (2019) 46 Fordham Urb. L.J. 364, 365.
[11] *When Algorithms Give Real Students Imaginary Grades* (Sept. 8, 2020) New York Times https://www.nytimes.com/2020/09/08/opinion/international-baccalaureate-algorithm-grades.html.
[12] *Id.*

decided to use an algorithm, which probably seemed like it would be cheaper and easier.

The process worked like this: Data scientists took student information and fed it into a computer. The computer then constructed a model that outputted individual student grades, which International Baccalaureate claimed the students would have gotten if they had taken the standardized tests that didn't happen. It's a legitimate data science method, similar to the methods that predict which Netflix series you'll want to watch next or which deodorant you're likely to order from Amazon.

The problem is, data science stinks at making predictions that are ethical or fair. In education, racial and class bias is baked into the system — and an algorithm will only amplify those biases.

Crude generalizations work for Netflix predictions because the stakes are low. If the Netflix algorithm suggests a show and I don't like it, I ignore it and move on with my day. In education, the stakes are much higher.[13]

  b. *Examples of harmful uses of ADS in state government*

Nationally, there have been several examples of state governments' use of ADS that have disproportionately harmed disadvantaged communities.

- Between 2013 and 2015, a Michigan ADS operating with minimal employee oversight wrongly accused 40,000 people of employment insurance fraud, many of whom were forced to pay heavy fines. Upon appeal, less than eight percent of those fraud charges were found to be legitimate.[14] The ADS cost the state $47 million and millions more as a result of lawsuits.
- In 2016, the state of Arkansas implemented an algorithm to assign access to Medicaid benefits. However, an estimated 19 percent of Medicaid beneficiaries had their benefits inappropriately cut, losing access to home care, nursing visits and medical treatments. In a lawsuit filed by Arkansas Legal Aid, the courts ultimately found those who were denied benefits could not effectively challenge the system, since there was no way of knowing what information factored into the algorithm's opaque decision-making process leading to that result. That case

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[13] *Id.*

[14] Alejandro de la Garza, *States' Automated Systems Are Trapping Citizens in Bureaucratic Nightmares With Their Lives on the Line* (May 20, 2020) *Time Magazine* https://time.com/5840609/algorithm-unemployment/.

> ultimately revealed the algorithm featured several design flaws, miscoding and incorrect calculations.[15]

- A market analysis algorithm used in Detroit to direct public housing subsidies, tax breaks and housing development redirected critical funding away from Detroit's poorest and predominantly black neighborhoods.[16]

In California, the CalWIN system, which provides a means for applying for CalFresh benefits, Medi-Cal and CalWORKS, included incorrectly translated policy in its code, which caused overpayments, underpayments, and improper terminations of public benefits, including the denial of Medicaid to foster children in contravention of federal law.[17] More recently, the ACLU found that the California Department of Public Health's COVID-19 vaccine distribution algorithm could "leave more than 2 million vulnerable Californians—many of them from Black and Latinx communities—without additional supply, despite the state's core goal of equity in vaccine distribution."[18]

A recent article by two professors from the University of California at Berkeley argues that government officials are increasingly purchasing ADS with insufficient knowledge of their design and operation, and how this aligns with public values.[19] The article states:

> At every level of government, officials contract for technical systems that employ machine learning—systems that perform tasks without using explicit instructions, relying on patterns and inference instead. These systems frequently displace discretion previously exercised by policymakers or individual front-end government employees with an opaque logic that bears no resemblance to the reasoning processes of agency personnel. However, because agencies acquire these systems through government procurement processes, they and the public have little input into—or even knowledge about—their design or how well that design aligns with public goals and values.

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[15] Colin Lecher, *What happens when an algorithm cuts your healthcare* (Mar. 21, 2018) *The Verge* https://www.theverge.com/2018/3/21/17144260/healthcare-medicaid-algorithm-arkansas-cerebral-palsy.

[16] Le, Vinhcent, *Algorithmic Bias Explained: How Automated Decision-Making Becomes Automated Discrimination* (23 Feb. 2021) The Greenlining Institute, http://greenlining.org/publications/reports/2021/algorithmic-bias-explained/

[17] Daniel Keats Citron, *Technological Due Process* (2007) 85 Wash. U. L. Rev. 1249, 1249 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1012360.

[18] *ACLU research suggests that California's vaccine distribution plan may leave more than 2 million vulnerable residents without additional supply* (May 6, 2021) ACLU Northern California, https://www.aclunc.org/news/aclu-research-suggests-california-s-vaccine-distribution-plan-may-leave-more-2-million.

[19] Diedre Mulligan and Kenneth Bamberger, *Procurement As Policy: Administrative Process for Machine Learning* (2019) 34 Berkeley Technology Law Journal 781 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3464203#page=4.

> […] When the adoption of these systems is governed by procurement, the policies they embed receive little or no agency or outside expertise beyond that provided by the vendor. Design decisions are left to private third-party developers. There is no public participation, no reasoned deliberation, and no factual record, which abdicates Government responsibility for policymaking.[20]

If the state agency is unable to understand or explain how an ADS that supplants a human decisionmaking process works, this raises due process concerns, as denials of rights or deprivations of property would be difficult to meaningfully challenge. (*See Mathews v. Eldridge* (1976) 424 U.S. 319, 333.) "Automated systems jeopardize due process norms. Their lack of meaningful notice, and a hearing officer's tendency to presume a computer system's infallibility, devalue hearings."[21]

c. Frameworks for addressing ADS

In 2018, New York City enacted the nation's first algorithmic accountability law, which regulates New York City agencies' use of algorithms be creating a task force to oversee the government's use of algorithms, examine how error and bias enter into their design, and recommend measures that ensure accuracy and fairness.

In 2019, the Canadian government adopted a Directive on Automated Decision-Making and an accompanying algorithmic impact assessment tool to guide the use of automated decision making at the federal level.[22] The Directive defines ADS as "any technology that either assists or replaces the judgement of human decision-makers." The Directive establishes impact assessment levels for ADS, based on the anticipated impact on the rights of individuals or communities, the health or well-being of individuals or communities, the economic interests of individuals, entities, or communities, and the ongoing sustainability of an ecosystem.

Article 22 of the European Union's General Data Protection Regulation provides that a "data subject shall have the right not to be subject to a decision based solely on automated processing, including profiling, which produces legal effects concerning him or her or similarly significantly affects him or her." Exceptions are allowed when necessary for entering into or performing a contract or when the person has granted explicit consent, provided that "the data controller … implement[s] suitable measures to safeguard the data subject's rights and freedoms and legitimate interests, at least the right to obtain human intervention on the part of the controller, to express his or her point of view and to contest the decision.

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[20] *Id.* at 781.

[21] *Technological Due Process*, *supra*, fn. 17.

[22] *Directive on Automated Decision-Making*, Government of Canada website, https://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=32592.

    d. The State procurement process

The State Contract Act prescribes certain standards and procedures governing the process of soliciting and awarding contracts for state procurement of goods and services, and is generally administered by the DGS. (Pub. Con. Code § 10100 et seq.; 10107.) When soliciting contracts, state agencies must generally hold a public bidding process and award contracts to the lowest responsible bidders. (Pub. Con. Code § 10180.) In other words, the cost basis provided by a prospective contractor is typically the key factor in decisions related to awarding state contracts, so long as the bidder "has demonstrated the attribute of trustworthiness, as well as quality, fitness, capacity, and experience to satisfactorily perform the public works contract." (Pub. Con. Code Sec. 1103.)

However, a separate statutory scheme governs the approval of contracts for IT projects and the CDT is charged with overseeing this process. These statutes are intended to "enable the timely acquisition of IT goods and services to meet the state's needs in the most value-effective manner." (Pub. Con. Code § 12100(a).) A "value-effective acquisition," for the purposes of state IT acquisition, may include, but is not limited to, all of the following: the operational cost the state would incur if the bid or proposal is accepted; the quality of the product or service, or its technical competency; the reliability of delivery and implementation schedules; the maximum facilitation of data exchange and systems integration; warranties, guarantees, and return policy; supplier financial stability; consistency of the proposed solution with the state's planning documents and announced strategic program direction; the quality and effectiveness of the business solution and approach; industry and program experience; the prior record of supplier performance; supplier expertise with engagements of similar scope and complexity; the extent and quality of the proposed participation and acceptance by all user groups; proven development methodologies and tools; and innovative use of current technologies and quality results. (Pub. Con. Code § 12100.7(e).)

Thus, existing law requires a holistic assessment of proposed contracts for IT procurement to determine the most appropriate proposal for the State's unique need, rather than the proposal that meets minimum criteria and provides the lowest initial cost. Arguably, scrutinizing and mitigating the potential harmful impacts of ADS is consonant with this holistic, value-based approach to IT procurement under existing law.

3. <u>Establishes a framework for assessing the potential impacts of high-risk ADS used by state agencies</u>

    a. Requires CDT to develop guidelines for identifying high-risk ADS

The bill requires the CDT, in consultation with the Department of General Services and stakeholder input, to establish and make public guidelines for identifying high-risk

ADS in a manner generally consistent, if appropriate, with international high-risk frameworks and standards.

i. Definition of ADS

The bill defines "automated decision system" as a computational process, including one derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues simplified output, including a score, classification, or recommendation, that is used to support or replace human decisionmaking and materially impacts natural persons. Under the bill, an ADS does not include a tool that does not automate, support, or replace human decisionmaking processes, including, but not limited to, a junk email filter, firewall, antivirus software, calculator, spreadsheet, database, data set, or other compilation of data.

Opponents argue the definition of ADS is vague and that it is "difficult for any state agency or contractor to predict with certainty whether a software falls inside or outside of the definition." Proponents respond that CDT can adopt nuanced guidance for stakeholders.

ii. Definition of "high-risk application"

The bill defines "high-risk application" as an ADS that does any of the following:
- Poses a significant risk to the privacy or security of personal information or is likely to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons, taking into account the novelty of the technology used and the nature, scope, context, and purpose of the ADS.
- Affects the legal rights, health and well-being, or economic, property, or employment interests of a natural person.
- Involves the personal information of a significant number of individuals with regard to race, color, national origin, political opinions, religion, trade union membership, genetic data, biometric data, health, gender, gender identity, sexuality, sexual orientation, criminal record, or any other characteristic identified in the Unruh Civil Rights Act.
- Meets any other criteria established by the CDT via regulations.

Examples of high-risk applications would likely include those that determine a person's eligibility for public benefits and services, are used for employment screening, or used by law enforcement authorities for profiling individuals or predicting the likelihood of recidivism.

b. *Inventory of state agencies' high-risk ADS*

The bill requires, on or before June 30, 2023, the CDT to conduct a comprehensive inventory of all high-risk ADS that have been proposed for, or are being used, developed, or procured by, state agencies. The CDT must submit a report of the comprehensive inventory to the Legislature by July 31, 2023. These provisions repeal July 31, 2027. While this process ensures that the state is aware of its high-risk ADS, it leaves a gap after 2023 as state agencies acquire new high-risk ADS.

c. *Encourages the submission of impact assessment reports for ADS procured after January 1, 2023*

With respect to ADS state agencies consider procuring, the bill, beginning January 1, 2023, would require the CDT or any other state agency seeking to award a contract for goods or services that includes the use, licensing, or development of an ADS for a high-risk application to *encourage* a bid response submitted by a prospective contractor to include an ADS impact assessment report. The bill was recently amended to make this assessment non-mandatory; however, opponents argue this will become a de facto requirement because businesses that do not provide an assessment will be at a disadvantage. While opponents would like to see this provision omitted, it could be pointed out that another way of alleviating this concern would be to make the assessment report mandatory.

An impact assessment report would involve disclosures to the contracting agency, including the source, capabilities, purpose, and benefits of the ADS; a thorough explanation of how the ADS functions; affirmative steps taken by the contractors to assess risks posed by the ADS; potential disparate impacts on the basis of protected characteristics; internal policies the contractor has used to identify disparate impacts; and best practices to avoid or minimize disparate impacts, as specified.

Proponents argue that the impact assessment report is essentially a worksheet that requires businesses and state agencies to take a hard look at the design and operation of an ADS, and to consider ways of mitigating identified negative impacts or limiting unintended consequences. Impact assessments could involve much more substantial undertakings such as third-party audits or internal audits to demonstrate the fairness and accuracy of the ADS. The bill does not mandate such undertakings.

d. *Disclosure of impact assessment reports*

A state agency that is provided an impact assessment report by a contract awardee must, within 30 days of awarding the contract, submit the report to the CDT, along with along with a statement describing the extent to which members of the public have access to the results of the ADS and are able to correct or object to its results, and where and how that information will be made available, along with any applicable procedures

for initiating corrections or objections, as appropriate. The CDT may, within 30 days of the agency's submission of the report, publish the report on its website; however, trade secrets, proprietary information, and intellectual property cannot be disclosed to the public.

Opponents of the bill argue that an "assessment requires disclosure of detailed information and even a requirement for a company to essentially admit to potential violations of the Unruh Civil Rights Act," which could then potentially be disclosed to the public. This argument seemingly implies that it is somehow preferable to continue to let such potential impacts go unexamined and unremedied. Of course, if a bidder completing an assessment discovers such potential impacts, they can attempt to recalibrate their ADS to mitigate such harms; indeed, incentivizing self-correction is one of the purposes of the bill. If the harms cannot be mitigated, then other bidders will likely be similarly situated and it will not lead to a competitive disadvantage. And, again, the assessment is not mandatory.

4. <u>Stakeholder positions</u>

a. *Support*

A coalition of privacy rights, civil rights, and consumer protection organizations, including the bill's sponsor, the Greenlining Institute, writes:

> We are a group that believe in the importance of fairness, accountability and equity in algorithms and automated decision-making systems (ADS). The public sector increasingly uses automated systems to make decisions and as a way to improve efficiency, implement complex processes and support evidence-based policy making. Government agencies are using ADS to determine access to benefits like unemployment and Medicare, and there is a growing push to increase the use of ADS as a way to deliver government services more effectively and innovatively. However, <u>poorly designed automated systems create unfair, biased and inaccurate results, causing disproportionate harm to low-income families and communities of color while also undermining trust in the public sector</u>.

(Emphasis in original; footnotes omitted.)

b. *Arguments for a stronger approach*

With respect to the prior version of the bill, which, among other things, would have mandated impact assessments for high-risk applications in the procurement process, Consumer Reports, in a support if amended position, requested several amendments to strengthen the bill. First, they recommended that artificial intelligence-enabled profiling used in determining access to basic services such as housing, financial services,

education, criminal justice, and healthcare services should be prohibited. Second, they recommended a continual evaluation process that would require vendors to update the agencies who have procured their technology whenever significant changes have been made to their algorithms or when other statistical biases occur due to these updates. Third, they argued for stricter oversight for determining whether agencies should be awarding contracts to potential vendors, including a task force or other authority to independently assess submitted ADS assessments from bid responses and decide which vendors to award contracts. Finally, Consumer Reports argues that the bill's provisions should apply to algorithms that are developed by state agencies instead of procured from third-parties.

   c. Opposition

A coalition of organizations, including the California Chamber of Commerce, the Internet Association, and TechNet, writes:

> We appreciate the recent amendments, however, we still have concerns that the bill will: (1) discourage participation in the state procurement process; and (2) the definition of automated decision system (ADS), upon which the proposal is based, is too broad and will create confusion. The issue of automated decision system is also one of the areas subject to rulemaking by the new privacy agency, the California Privacy Protection Agency (CPPA), where details regarding definitions and application in different settings or agencies can be discussed amongst stakeholders.
>
> **AB 13's "Encouragement" for Contractors to Submit a Detailed Impact Assessment Will Discourage Bidding.** **AB 13** has been amended so that it does not require but *encourages* contractors to submit impact assessments. While we appreciate that the new language does not mandate an assessment, we are concerned it will essentially become a *de facto* requirement as any entity that bids on a contract that does not include an assessment will likely be at a disadvantage to be awarded the contract. The "encouraged" assessment requires disclosure of detailed information and even a requirement for a company to essentially admit to potential violations of the Unruh Civil Rights Act. And, there is nothing in the bill that would protect or preclude public disclosure of this assessment.
>
> **AB 13 Does Not Adequately Define ADS.** In the bill, ADS is defined as any computational process that issues a simplified output that is used to support or replace human decision making and materially impacts natural persons. But in its attempt to be all encompassing, the definition goes too far. The recent amendments attempt to account for this overreach by creating exceptions to the rule, stating that ADS does not include "a tool that does not automate, support, or replace human decision-making processes" and even explicitly carves out junk email filters, calculators, and spreadsheets. **AB 13**'s definition of ADS is so

unclear that the exception is just a restatement of the definition with the word "not" inserted into it and some examples added. Even with this, it is still difficult for any state agency or contractor to predict with certainty whether a software falls inside or outside of the definition.

Finally, under the California Privacy Rights Act (CPRA), one of the categories for the CPPA to consider and develop regulations on is businesses' use of automated decision making technology, including profiling, and requiring "*businesses' response to access requests to include meaningful information about the logic involved in those decision making processes, as well as a description of the likely outcome of the process with respect to the consume*r." *See* Civil Code section 1798.185(a)(16).[23] The Legislature should wait for the new agency to develop regulations on this issue, including a potential definition of ADS, before pursuing new requirements.

(Emphasis in original.)

5. <u>Amendments</u>

In response to concerns, the author has agreed to clarify and narrow the scope of the bill based on suggested amendments from various stakeholders. The amendments include the following:

- The definitions of ADS and "high-risk application" are narrowed and refined.
- With respect to the CDT's inventory and report regarding state agencies' high-risk ADS, the bill will be amended to repeat this process in 2025 and again in 2027. This would result in ongoing inventory and two more reports being provided to the Legislature, which may lay the foundation for further regulation. The provision repeals after the report in 2027 is provided.
- The scope of impact assessment reports is clarified and the provision relating to disclosures regarding best practices to avoid or minimize disparate impacts is narrowed.
- Provisions providing open-ended discretion to the CDT are removed and the CDT is required to adopt regulations to effectuate the bill's provisions.

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[23] The quoted provision relates to access and opt-out rights with respect to businesses' use of ADS. The provision, in full, is as follows:

1798.185. Regulations.
(a) On or before July 1, 2020, the Attorney General shall solicit broad public participation and adopt regulations to further the purposes of this title, including, but not limited to, the following areas:
[…]
(16) Issuing regulations governing access and opt-out rights with respect to businesses' use of automated decisionmaking technology, including profiling and requiring businesses' response to access requests to include meaningful information about the logic involved in those decisionmaking processes, as well as a description of the likely outcome of the process with respect to the consumer.

<u>Amendments</u>[24]

12115. For purposes of this chapter, the following shall apply:

(a) (1) "Automated decision system" means a computational process, ~~including one~~ derived from machine learning, statistical modeling, data analytics, or artificial intelligence, that issues simplified output, including a score, classification, or recommendation, that is used to ~~support~~ *substantially assist* or replace human *discretionary* decisionmaking and materially impacts natural persons.

(2) "Automated decision system" does not include a tool that does not ~~automate, support~~, *substantially assist* or replace human *discretionary* decisionmaking processes *and that does not materially impact natural persons*, including, but not limited to, a junk email filter, firewall, antivirus software, calculator, spreadsheet, database, data set, or other compilation of data.

(b) "High-risk application" means ~~a use of an automated decision system for which any of the following apply:~~ *the use of an automated decision system that meets either of the following criteria:*

(1) The use of the automated decision system is likely to have a high impact on the legal rights, health, or economic interests of a natural person.

~~(1) Poses a significant risk to the privacy or security of personal information or is likely to result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons, taking into account the novelty of the technology used and the nature, scope, context, and purpose of the automated decision system.~~

~~(2) Affects the legal rights, health and well-being, or economic, property, or employment interests of a natural person.~~

~~(3) Involves~~ *(2) The use of the automated decision system is likely to pose a material risk of harm from the use of* the personal information of a significant number of individuals with regard to race, color, national origin, political opinions, religion, trade union membership, genetic data, biometric data, health, gender, gender identity, sexuality, sexual orientation, criminal record, or any other characteristic identified in the Unruh Civil Rights Act (Section 51 of the Civil Code).

~~(4) Meets any other criteria established by the Department of Technology in regulations issued pursuant to Section 12117.~~

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[24] The amendments may also include technical, nonsubstantive changes recommended by the Office of Legislative Counsel as well as the addition of co-authors.

(c) "Simplified output" means output composed of fewer dimensions than the respective inputs used to generate it.

12115.4. (a) On or before June 30, 2023, the Department of Technology shall conduct a comprehensive inventory of all high-risk automated decision systems that have been proposed for, or are being used, developed, or procured by, state agencies. The department shall submit a report of the comprehensive inventory to the Legislature by July 31, 2023.

(b)
(b) The Department of Technology shall repeat the process specified in subdivision (a) in 2025 and in 2027.

(c) The report shall be submitted in compliance with Section 9795 of the Government Code.

(c)
(d) Pursuant to Section 10231.5 of the Government Code, this section is repealed on July 31, 2027.

12115.5. Beginning January 1, 2023, the Department of Technology or any other state agency seeking to award a contract for goods or services that includes the use, licensing, or development of an automated decision system for a high-risk application shall encourage a bid response submitted by a prospective contractor to include an automated decision system impact assessment report that makes the following disclosures to the contracting agency:

(a) Specify the name, vendor, and version of the automated decision system and describe its general capabilities *and limitations*, including, but not limited to, reasonably foreseeable capabilities outside the scope of its proposed use.

(b) Describe the purpose of the automated decision system, including, but not limited to, the decision or decisions it can make or support, and its intended benefits compared to alternatives, including, but not limited to, the ~~results of any research assessing~~ *information about* its efficacy and relative benefits.

(c) Provide a thorough explanation of how the automated decision system functions, the logical relationship between data inputs and outputs, and how those outputs relate to the decision or decisions made or supported by the system, including, but not limited to, limitations on inferences that can be drawn from those ~~results~~ *outputs*.

(d) Describe the affirmative steps the prospective contractor has taken, or any third-party engagement, to conduct legitimate, ~~independent,~~ and reasonable tests of the automated decision system to help assess any risks posed to the privacy or security

of personal information and any risks that may result in inaccurate, unfair, biased, or discriminatory decisions impacting natural persons.

(e) Describe any potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act (Section 51 of the Civil Code) from the proposed use of the automated decision system, including, but not limited to, reasonably foreseeable capabilities outside the scope of its proposed use.

(f) Describe any internal policies the prospective contractor has adopted for identifying potential disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act (Section 51 of the Civil Code) resulting from the proposed use of the automated decision system.

(g) Provide best practices for the proposed high-risk application of the automated decision system to avoid or minimize any disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act (Section 51 of the Civil Code), including ~~all of the following:(1) How~~ *how* and when the automated decision system should be deployed or used, and the relevant technical expertise necessary to minimize the potential for inaccurate, unfair, biased, or discriminatory decisions impacting natural persons.

~~(2) How to limit the collection and retention of information to that which is directly relevant and necessary for the specified purpose.~~

~~(3) How automated decision system data should be stored and accessed to mitigate security risks and threats.~~

(h) Any additional information specified in the solicitation, or otherwise required by the contracting agency for the purpose of effectively evaluating and avoiding or minimizing disparate impacts on the basis of characteristics identified in the Unruh Civil Rights Act (Section 51 of the Civil Code) from the use of the automated decision system.

(i) Any additional information required in accordance with regulations adopted by the Department of Technology pursuant to Section 12117.

12117. On or before January 1, 2023, the Department of Technology shall develop a sample automated decision system impact assessment report for prospective contractors and ~~may~~ *shall* adopt regulations and publish guidelines as necessary to effectuate the purposes of this chapter and shall do so in a manner consistent, where possible, with international high-risk frameworks and impact assessment requirements.

SUPPORT

Greenlining Institute (sponsor)
Consumer Federation of America
Electronic Privacy Information Center
Media Alliance
National Association of Social Workers, California Chapter
Oakland Privacy
Privacy Rights Clearinghouse
Secure Justice
TechEquity Collaborative

OPPOSITION

Advanced Medical Technology Association
Alliance for Automotive Innovation
American Council of Life Insurers
Association of California Life & Health Insurance Companies
Association of National Advertisers
California Bankers Association
California Business Properties Association
California Chamber of Commerce
California Credit Union League
California Financial Services Association
California Grocers Association
California Land Title Association
California Manufacturers & Technology Association
California Mortgage Bankers Association
California Trucking Association
Consumer Data Industry Association
Consumer Technology Association
Electronic Transactions Association
Harbor Association of Industry & Commerce
Insights Association
Internet Association
Internet Coalition
MPA—The Association of Magazine Media
Pacific Association of Domestic Insurance Companies
Securities Industry and Financial Markets Association
Silicon Valley Leadership Group
TechNet
Technology Industry Association of California

RELATED LEGISLATION

Pending Legislation:

AB 858 (Jones-Sawyer, 2021) provides that the use of technology—defined to include algorithms derived from the use of health care related data—shall not limit a worker who is providing direct patient care from exercising independent clinical judgment in the assessment, evaluation, planning, and implementation of care, nor from acting as a patient advocate.

Prior Legislation:

AB 2269 (Chau, 2020) the Automated Decision Systems Accountability Act of 2020 among other things, would have required a business in California that provides a program or device that uses an ADS to take affirmative steps to ensure that there are processes in place to continually test for biases, as specified; and, would have established an ADS Advisory Task Force, as specified. The bill died in the Assembly Privacy and Consumer Protection Committee.

ACR 125 (Jones-Sawyer, 2020) would have urged policymakers in both federal and state government to explore ways to promote the development and use of new technologies to reduce bias and discrimination in hiring and employment. The measure died in this Committee.

SB 348 (Chang, 2019) would have required the Director of CDT to develop a strategic plan to aid departments and agencies with incorporating AI into state IT operations, as specified. The bill died in the Assembly Appropriations Committee.

SB 444 (Umberg, 2019) would have requested the Regents of the University of California (UC) to enact a resolution authorizing the law schools at UC Berkeley and UC Irvine to participate in a pilot project to develop AI or machine-learning solutions to address access to justice issues faced by self-representing litigants in their respective courts. The bill died in the Assembly Higher Education Committee.

AB 976 (Chau, 2020) would have established the AI in State Government Services Commission to gather input on how AI and data science could be used to improve state services. The bill was held on the Senate Appropriations Committee suspense file.

AB 1576 (Calderon, 2019) would have required the Secretary of Government Operations to appoint participants to an AI working group to evaluate the uses, risks, benefits, and legal implications associated with the development and deployment of AI by California-based businesses. The bill was held on the Senate Appropriations Committee suspense file.

SJR 6 (Chang, Res. Ch. 112, Stats. 2019) urged the President and the Congress of the United States to develop a comprehensive AI Advisory Committee and to adopt a comprehensive AI policy.

AB 594 (Salas, 2019) would have authorized the Director CDT to designate a position within the department to evaluate the uses of AI in state government and to advise the Director of Technology on incorporating AI into state IT strategic plans, policies, standards and enterprise architecture, and would have required CDT to adopt guidelines by January 1, 2021, to govern the use and implementation of AI technologies in state government functions, as specified. The bill was vetoed by Governor Newsom.

ACR 215 (Kiley, Resolution Ch. 206, Stats. 2018) expressed the Legislature's support for a set of principles for the governance of AI known as the 23 Asilomar AI Principles.

PRIOR VOTES:

Senate Governmental Organization Committee (Ayes 8, Noes 3)
Assembly Floor (Ayes 52, Noes 16)
Assembly Appropriations Committee (Ayes 12, Noes 3)
Assembly Privacy and Consumer Protection Committee (Ayes 9, Noes 0)

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