

ROBOTS: A Legal Structure for Autonomous Agents

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I. Overview

An autonomous agent is as software program that controls things in the real world. For instance, “self-driving cars.” Autonomous agents will soon be able to do many of the jobs that traditionally only humans could do. Because these things are new, they need a new legal framework that will encourage and regulate their activity.

II. Problem / Opportunity

Problem: Autonomous agents will cause disruption, unemployment, and the displacement of human workers, including commercial drivers which make up a large percentage of the Vermont workforce.

Opportunity: For Vermont to be a first mover in the creation of a legal structure for governing autonomous agents in a manner that protects its own interests while generating new opportunities and revenue.

III. Solution:

To create a framework for recognizing autonomous agent corporations via a sub-chapter of Vermont corporate code that creates a safe harbor against liability for the directors, officers and owners of companies whose principal business purpose is to deploy an autonomous agent.

This legal solution should address the following five points:

1. Unique label. Provide each autonomous agent with a legally useful label distinguishing it from other instances of its type.
2. Autonomy. Recognize that autonomous agents are legally capable of independent decision-making.
3. Supervision and responsibility. Define the degree to which an autonomous agent is subject to human supervision and the responsibility of the supervisor.
4. Regulation. Define the role that the government takes and to what end.
5. Economic and social effects. Determine and address the external economic and social effects.

IV. Pros / Cons

Pro- By providing an established and predictable regulatory environment Vermont would remove some of the uncertainty for companies wishing to deploy autonomous agents in new markets and environments. This, in turn, could provide Vermont with a potentially substantial revenue stream from licensing fees, franchise fees, and other business-related taxes.

Pro- While the loss of traditional jobs to autonomous agents may be inevitable, advance preparation would put Vermont in a position to mitigate some of the social and economic

damage. Revenues generated could be directed to services for those adversely affected by a transition to a more autonomous economy.

Pro- A law that accommodates and eases the adoption of autonomous agent technology which could have numerous benefits to public safety, access to goods and services, and overall quality of life for many people.

Pro- A law that establishes reasonable care in the supervision of autonomous agents could generate its own set of employment opportunities.

Pro- Safe harbor regulations could help to drive further innovation.

Con- For mostly unrelated reasons, the application of “corporate personhood” may be viewed as intensely controversial in many quarters.

Con- Because of the general “creepiness factor” connected with non-human agents making decisions in the real world, this topic may elicit all kinds of negative responses. Choice of language should be particularly sensitive to this.

Con- Because we are dealing with new technology being used in new ways, the risk of unintended consequences may be particularly great. This creates a need for intensive and continuous oversight. On the other hand, taking a reactive stance may be even more perilous.

Con- How autonomous agents will be insured hasn’t yet been determined. Incorrectly predicting how insurance will be administered could produce a new set of obstacles. On the other hand, being ahead of the curve would allow Vermont to steer the conversation in ways that are advantageous.

Con- A law that protects the interests of the “owners” of autonomous agents may be organically at odds with the ultimate interests of those whose jobs are replaced. On the other hand, a legal framework providing safe harbor to companies could facilitate the emergence of locally owned operators of autonomous agents.

V. Legislative Language.

A. The following changes will be made to Title 11A of the Vermont Statutes

Chapter 22 Autonomous Agent Corporations

§22.01 For the purposes of this title, an “autonomous agent” is an artificial decision-capable agent operating without the interference of a human being.

§22.02 A Vermont corporation may be established for the purposes of providing legal recognition of an autonomous agent. Such a corporation will be known as an “autonomous agent corporation.” Each autonomous agent corporation may cover the activities of only one autonomous agent.

§22.03 The standard of care necessary to rely on the limitation of liability for officers, directors and shareholders of a corporation provided for in §6.22 and §8.30(d) of this title will be met by a corporation which does the following:

- a) Exercises reasonable care in the creation or procurement of the hardware and software embodying the autonomous agent.
- b) Exercises reasonable care in the deployment and supervision of the autonomous agent.
- c) Maintains, and when necessary exercises, the ability to turn off the autonomous agent.
- d) Gathers and maintains reasonable records of the operation and maintenance of the autonomous agent.

§22.04 Each autonomous agent will have a unique identifier which will be included in the name of its autonomous agent corporation and shall be registered with a Legal Entity Identifier process.

§22.05 The Secretary of State's office shall collect a fee of \$200 per year from each autonomous agent corporation in addition to the normal franchise and business taxes with respect to each autonomous agent.

B. Regulatory Structure:

1. The Department of Financial Regulation shall develop and recommend an overall regulatory structure for the activities of autonomous agency corporations and of autonomous agents in the State of Vermont generally and will report on its findings to the General Assembly by no later than _____.

2. In the development of this structure, the Department of Financial Regulation shall coordinate with other departments with jurisdiction over particular activities such as the Department of Transportation for autonomous vehicles.

C. Economic Development and Impact Mitigation

1. The Department of Financial Regulation shall work with the Department of Economic Development and the Department of Labor to create a study of the anticipated positive and negative economic and social impacts of autonomous agents for Vermont, and will report on the findings of that study to the General Assembly by no later than _____.

IV. Conclusions

The robots are coming. There's no getting out of this. But getting out in front of this will be immensely beneficial. Providing a framework for recognizing and regulating autonomous agents is a necessity. Being better informed is also a necessity. Our proposed bill accomplishes these goals.