GIVE THE LITTLE GUYS EQUAL OPPORTUNITY AT TRADE SECRET PROTECTION: WHY THE "REASONABLE EFFORTS" TAKEN BY SMALL BUSINESSES SHOULD BE ANALYZED LESS STRINGENTLY

by Jermaine S. Grubbs^{*}

The most important factor considered when determining the appropriateness of trade secret protection is whether the proposed trade secret owner made "reasonable efforts" to ensure the secrecy of the information on which she now seeks trade secret protection. This Comment suggests that the efforts made by a small business to ensure the secrecy of its information should be evaluated less stringently than the efforts made by large businesses. First, the author summarizes the current state of trade secret law and explains why small businesses need trade secret protection and why the evaluation method currently used is too harsh on small businesses. Then, the author details the standard of evaluation for "reasonable efforts" and discusses three cases where the efforts of small businesses were evaluated using the current, inflexible analysis, and severe unfairness resulted. This Comment next suggests a three-step analysis to effectively evaluate whether a small business made "reasonable efforts" to maintain the secrecy of the information. The three-step analysis is then applied to the three cases discussed previously. In conclusion, two potential criticisms to the suggested threestep analysis are addressed.

I.	INTRODUCTION	422
II.	DEFINING SMALL BUSINESSES AND EXPLAINING THEIR	
	IMPORTANCE	423
III.	TRADE SECRET LAW'S "REASONABLE EFFORTS"	
	REQUIREMENT AND WHY IT IS TOO STRINGENT FOR	
	SMALL BUSINESSES TO SATISFY	425
IV.	EXAMINATION OF THREE CASES DEMONSTRATING THE	
	UNFAIRNESS THAT RESULTS WHEN SMALL BUSINESSES	
	ARE EVALUATED UNDER THE CURRENT TEST	430
	A. Colorado Supply, Inc. v. Stewart	430
	B. Palin Manufacturing Co. v. Water Technology, Inc	
	C. Jackson v. Hammer	433

^{*} Student, Lewis & Clark Law School; J.D. expected 2005. The author wishes to thank Professor Joe Miller for his advice and guidance and Anda Lincoln for her help. Also, the author wishes to thank her husband, Adam, for his unwavering support.

٧.	RE	COMMENDATION OF A THREE-STEP ANALYSIS TO	
	EV.	ALUATE A SMALL BUSINESS'S "REASONABLE EFFORTS"	
	AN	D POTENTIAL CRITICISMS ADDRESSED	437
	A.	Step One: Determine Whether the Small Business was	
		Reasonably Able to Identify the Information as a Trade Secret	437
	B.	Step Two: Cost-Benefit Analysis Taking Into Account Financial	
		Resources and Employee Goodwill	439
	C.	Step Three: Determine Whether Seeking a Judicial Remedy is the	
		Cheapest and Most Efficient Way to Protect the Trade Secret	440
	D.	The Three-Step Analysis Applied to the Three Cases Previously	
		Discussed	441
		1. Colorado Supply, Inc. v. Stewart	441
		2. Palin Manufacturing Co. v. Water Technology, Inc	442
		3. Jackson v. Hammer	443
	E.	What the Recommended Three-Step Analysis Accomplishes and	
		Potential Criticisms	445
VI.	CO	NCLUSION	446

I. INTRODUCTION

Small businesses are crucial to the U.S. economy—representing 99.7 percent of all employers and producing 13 to 14 more patents per employee than large firms. Businesses have increasingly been forced to turn to trade secret protection to protect their interests, because courts have increasingly invalidated patents in recent years. Since small businesses produce over ten times more patents per employee than large firms, small businesses are more likely to turn to trade secret protection to protect their interests in response to the courts' increased patent invalidation.

Eligibility for trade secret protection is determined by evaluating several factors. Courts have concluded that a determinative factor is whether the proposed trade secret owner made "reasonable efforts" to maintain the secrecy

¹ U.S. SMALL BUS. ADMIN., FREQUENTLY ASKED QUESTIONS: ACADEMIC RESEARCH ON SMALL BUSINESSES (HOW IMPORTANT ARE SMALL BUSINESSES TO THE U.S. ECONOMY?), *at* http://appl.sba.gov/faqs/faqindex.cfm?areaID=2 (last visited November 6, 2004).

² Note, Trade Secret Misappropriation: A Cost-Benefit Response to the Fourth Amendment Analogy, 106 HARV. L. REV. 461, 461 (1992); see John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185, 194, 205–07 (1998) [hereinafter Allison & Lemley, *Empirical Evidence*] (The population of the study was 299 litigated patents which had reached final validity decisions in district courts or the Federal Circuit from 1989 to 1996. The study found 46% of patents were invalidated.). But see John R. Allison & Mark A. Lemley, *Who's Patenting What? An Empirical Exploration of Patent Prosecution*, 53 VAND. L. REV. 2099, 2105, 2106 n.23 (2000) [hereinafter Allison & Lemley, *Who's Patenting What?*] (Since there is little empirical research on patent validity determinations, the authors listed two studies covering earlier patent validity determinations. P.J. Frederico found an overall validity rate of 30–40% during 1925 to 1954. Gloria K. Koenig found an overall validity rate of 35% from 1953 to 1978.).

of the information for which she now seeks trade secret protection.³ The "reasonable efforts" factor is highly meaningful, but complex, for three reasons. First, the amount of effort (defensive measures) required is proportional to the value of the secret. Second, trade secret law balances the need to protect information while also encouraging disclosure of some information by only protecting information that would not be disclosed voluntarily or accidentally.⁴ Third, the "reasonable efforts" factor provides evidentiary support that a secret was properly maintained and suggests that the defendant obtained the secret through improper means. Courts determine whether the business made "reasonable efforts" by evaluating the totality of the circumstances. However, courts agree that some actual, affirmative measures must be taken.⁵

This Comment suggests that courts should evaluate the "reasonable efforts" a small business makes to maintain the secrecy of its information less stringently than the efforts made by large businesses. Specifically, it recommends a three-step analysis which provides small businesses with an equal opportunity to receive or maintain trade secret protection. Before discussing the recommended three-step analysis in Part V, it is important to provide context for this discussion by defining a small business and explaining its importance in Part II; explaining trade secret law, detailing the "reasonable efforts" analysis used for trade secret protection, and explaining why it is difficult for small businesses to satisfy the "reasonable efforts" factor of trade secret protection analysis in Part III; and analyzing three cases to illustrate the unfairness to small businesses that results when the current, inflexible "reasonable efforts" evaluation is used in Part IV. Finally, after the three-step analysis is detailed in Part V, the three cases previously discussed are reevaluated using the recommended three-step analysis and potential criticisms of the three-step analysis are addressed.

II. DEFINING SMALL BUSINESSES AND EXPLAINING THEIR IMPORTANCE

To be able to correctly apply the three-step analysis this Comment later recommends, it is crucial to set the size parameters for a *small* business. To understand why the less stringent, three-step analysis recommended is better than the inflexible test currently employed, it is also important to understand why small businesses are important to the U.S. economy. This section defines and then explains the importance of small businesses.

³ See Unif. Trade Secrets Act § 1(4)(ii) (amended 1985), 14 U.L.A. 437–438 (1990); Restatement of Torts § 757, cmt. b (1939); Enterprise Leasing Co. of Phoenix v. Ehmke, 3 P.3d 1064, 1070 (Ariz. Ct. App. 1999).

 $^{^4}$ William M. Landes & Richard A. Posner, The Economic Structure of Intellectual Property Law 364 (2003).

⁵ 1 STEVEN C. ALBERTY, ADVISING SMALL BUSINESSES § 35:15 (2004); David W. Slaby et al., *Trade Secret Protection: An Analysis of the Concept "Efforts Reasonable Under the Circumstances to Maintain Secrecy,"* 5 SANTA CLARA COMPUTER & HIGH TECH. L.J. 321, 327 (1989).

The Small Business Administration (SBA) establishes clear size standards for businesses based on the industry in which the business operates. ⁶ The Small Business Act states that small businesses may be defined by number of employees, dollar volume of business, net worth, and other factors.⁷ For businesses in the manufacturing, mining, and wholesale trade industries, the number of the employees is determinative—the cut-off is set at 500 employees in most manufacturing and mining industries and 100 employees in the wholesale trade industries.⁸ The evaluation of retail, service, and construction industry businesses focuses on the average annual revenues earned—the cap is set at \$6 million for most retail and service industry businesses and \$28.5 million for most construction industry businesses. The SBA developed these size standards by evaluating several factors, including the following: industry structure, degree of competition, average firm size, startup costs, and entry barriers. 10 The size parameters established by the SBA provide the criteria for when the less stringent, three-step analysis recommended later in this Comment should be utilized.

Small businesses make up over 99.7 percent of all employer firms and employ 39 percent of high technology workers, including engineers and scientists, so it is not surprising that small businesses produce 13 to 14 times more patents per employee than large firms. Small businesses also generate 60 to 80 percent of new jobs annually. From these statistics, it is clear that small businesses are crucial to the U.S. economy. By employing 39 percent of the high technology workers and producing patents much more frequently than large firms, small businesses rely heavily on statutory protection to protect their inventions and information developed. Patent protection has become less favorable in recent years because patents are being invalidated at a very high rate. Small businesses are patents are being invalidated at a very high rate.

The covert theft of confidential business information—trade secrets—increased more than 300 percent from 1992 to 1995 and "[1]osses exceeded \$1.5 billion in 1995." Businesses of all sizes have been targeted. Smaller companies "with annual sales of less than \$11 million experience most of the

⁶ U.S. SMALL BUS. ADMIN., FREQUENTLY ASKED QUESTIONS: SIZE STANDARDS (HOW DOES THE SBA DEFINE A SMALL BUSINESS?), *at* http://appl.sba.gov/faqs/faqindex.cfm?areaID=15 (last visited November 6, 2004).

⁷ Small Business Act, 15 U.S.C. § 632 (2000).

 $^{^8\,}$ U.S. SMALL Bus. Admin., supra note 6, at http://appl.sba.gov/faqs/faqindex.cfm? areaID=15.

⁹ Id

¹⁰ U.S. SMALL BUS. ADMIN., FREQUENTLY ASKED QUESTIONS—SIZE STANDARDS (HOW DOES THE SBA DEVELOP OR REVISE A SIZE STANDARD?), *at* http://appl.sba.gov/faqs/faqindex.cfm?areaID=15 (last visited November 6, 2004).

 $^{^{11}\,}$ U.S. SMALL BUS. ADMIN., supra note 1, at http://appl.sba.gov/faqs/faqindex.cfm? areaID=2.

¹² Id.

Note, supra note 2, at 461; Allison & Lemley, Empirical Evidence, supra note 2, at 205.

¹⁴ Janet S. Greenlee, 'Spies Like Them'—How to Protect Your Company from Industrial Spies, 78 MGMT. ACCT., Dec. 1996, at 31, 31.

information theft." As a result, small businesses are scrambling to find different protective shields—one of those shields is trade secret protection. The following section describes trade secret protection.

III. TRADE SECRET LAW'S "REASONABLE EFFORTS" REQUIREMENT AND WHY IT IS TOO STRINGENT FOR SMALL BUSINESSES TO SATISFY

Trade secret protection is complex. To explain the doctrine it is necessary to define a trade secret, explain the justifications for trade secret protection, discuss the two legal sources of trade secret protection (one statutory, the other common law), and explain what is required to obtain trade secret protection. The determinative factor, the "reasonable efforts" factor, is especially important. The importance of, and difficulties in, satisfying this factor will be discussed in the last portion of this section.

Trade secret law protects "any formula, pattern, device or compilation of information which is used in one's business, and which gives [the business] an opportunity to obtain an advantage over competitors who do not know or use it." Trade secret protection finds justification under two theories—the utilitarian and tort theories. In the utilitarian view, protecting proprietary information against theft encourages the investment in, and development of, such information. Under the tort theory, trade secret protection deters wrongful acts and encourages moral business practices. This Comment's recommended analysis encourages small businesses to protect their sensitive information from theft or other wrongful conduct without imposing a financial or goodwill burden that is too cumbersome on the business.

There are two main sources for trade secret protection—the Restatement of Torts and the Uniform Trade Secrets Act (UTSA). The Restatement of Torts represents the common law source, while the UTSA is the statutory source for trade secret protection. The Restatement of Torts lists the following six factors to consider when determining whether information is a trade secret: (1) the extent to which the information is known outside of the business, (2) the extent to which it is known by employees of the business, (3) the extent of measures taken to guard the secrecy of the information, (4) the value of the information to the individual or business and to its competitors, (5) the amount of money and effort put into developing the information, and (6) how easily the information could be properly acquired by others.

The UTSA, which has been adopted by 43 states, defines a trade secret as information that, among other things, is "the subject of efforts that are

¹⁵ Id.

¹⁶ RESTATEMENT OF TORTS § 757, cmt. b (1939).

 $^{^{17}}$ Robert P. Merges et al., Intellectual Property in the New Technological Age 31 (3d ed. 2003).

¹⁸ *Id*.

¹⁹ RESTATEMENT OF TORTS (1939); UNIF. TRADE SECRETS ACT (amended 1985), 14 U.L.A 437 (1990).

²⁰ RESTATEMENT OF TORTS § 757, cmt. b (emphasis added).

reasonable under the circumstances to maintain its secrecy." Both sources of trade secret protection evaluate whether under the circumstances "reasonable efforts" were taken to guard the secrecy of the information. Courts have held the "reasonable efforts" factor to be the determinative factor in the evaluation of potential trade secrets. 22

The "reasonable efforts" factor is a meaningful factor in determining trade secret protection for the following three reasons: the amount of effort corresponds to the value of the secret; the protection is only accorded to things that would be not be voluntarily or accidentally disclosed; and protective effort provides evidentiary support to indicate that the information was in fact maintained as a secret and, thus, that the defendant secured the secret through improper means. These three rationales are further explored as follows. First, the cost and amount of defensive measures required "should be roughly proportional to the value of the secret to prospective appropriators."²³ A prospective appropriator will expend effort and circumvent defensive measures to obtain a competitor's information based upon the value of the information. Therefore, the trade secret holder will only safeguard the information which is valuable. The value of the information to the information holder and prospective appropriator will determine the amount of protection required. The "reasonable efforts" factor functions to ensure that only valuable secrets are protected, which leads to efficiency in protection.

Second, trade secret law must balance the inconsistent desires of trade secret producers. On the one hand, producers of information want access to information produced by their competitors to avoid duplication of effort and to cheaply copy advancements. On the other hand, the trade secret producers desire protection for their own information.²⁴ Thus, trade secret law weighs the need to protect a business's information against the need to encourage disclosure of some business information. The information society needs or wants disclosed is information that potentially benefits consumers, such as better manufacturing schemes. Society wants better manufacturing schemes disclosed because as efficiency increases prices often decrease. The balance struck by trade secret law is that only the most costly or evil means of unmasking a secret are prohibited.²⁵ This balance allows a producer of information to obtain information from its competitors as long as evil means are not employed, and it allows the producer of information to protect its most valuable protected secrets from disclosure. Without protection, a business owner is likely to keep all information as secret as possible for fear that a competitor will steal the information and benefit from it economically. Without disclosure, society loses out on the potential benefit of the information. As a result, only information that a producer of information would refuse to disclose

²¹ UNIF. TRADE SECRETS ACT § 1(4)(ii) (amended 1985), 14 U.L.A. 437–38 (emphasis added).

²² Enterprise Leasing Co. of Phoenix v. Ehmke, 3 P.3d 1064, 1070 (Ariz. Ct. App. 1999).

²³ LANDES & POSNER, *supra* note 4, at 357.

²⁴ *Id.* at 364.

²⁵ Id.

without protection—information that could only be acquired through costly and evil means (and not obtained by the information holder's mistake or willingness)—is protected.

Third, the "reasonable efforts" factor has two evidentiary aspects that make it easier to prove the information is a secret and make it easier to determine that the defendant obtained the secret through improper means. The "reasonable efforts" factor makes it easier to prove the information is a secret when reasonable protective measures are taken to guard the information. It may be difficult to prove that information is secret if the business did not take protective measures, because the information would more likely be exposed to the public—thereby becoming generally known and losing trade secret protection. Security measures signal to competitors and the public what information belongs to the business and warns them that the business is willing to protect its information if misappropriated. The security measures tell the world that the business considers the information secret and attempts to prevent others from using the information.

Also, the "reasonable efforts" factor allows a court to infer more easily that the defendant employed improper means to obtain the information when reasonable efforts are made. The more protective measures a business employs, the more obstacles a defendant would have to circumvent in order to obtain the information. The more protective measures a trade secret misappropriator must circumvent, the more evil and costly the misappropriator's efforts appear.

Courts evaluate the totality of the circumstances to determine whether the efforts to guard the secrecy of the information were reasonable,²⁷ and courts hold that a business must take "actual, affirmative measures" rigorous enough to force another to use improper means to discover the information.²⁸ However, the owner may only realize after the trade secret is exposed to the public that trade secret protection would have been desirable.²⁹ Identifying potential trade secrets is "a critical first step towards preventing disclosure or, in the event of theft, readily proving that the company had protections in place."³⁰ However, "[m]ost businesses do not realize the importance of determining what proprietary information qualifies as a trade secret. . . . [Nor are they] aware that . . . a company's portfolio of trade secrets changes constantly."³¹ It may be difficult for any business, especially a small business that lacks legal counsel or outside input, to identify information as protectable under trade secret law. Also, a small business may want all of its information protected, especially processes and other patentable things which it cannot afford to patent due to the time and expense of the patent prosecution process, but this desire does not necessarily translate into resources to protect the secrets.

 $^{^{26}}$ UNIF. TRADE SECRETS ACT § 1(4)(i) (listing "not being generally known . . . [or] readily ascertainable" as one of the elements of a trade secret).

²⁷ 1 Alberty, *supra* note 5, § 35:15.

²⁸ Slaby et al., *supra* note 5, at 324, 327.

²⁹ 1 Alberty, *supra* note 5, § 35:15.

³⁰ Edwin Fraumann & Joseph Koletar, *Trade Secret Safeguards*, SECURITY MGMT., Mar. 1999, at 63, 63.

³¹ *Id*.

What considerations determine whether the efforts are reasonable? The following factors aid in determining whether the efforts taken by a business are reasonable: (1) the existence of nondisclosure agreements; (2) the nature and extent of efforts made to prevent unauthorized parties from obtaining the information, including security measures; 32 and (3) how prevalent trade secret theft is within the industry. 33 Courts usually do not consider whether acquiring an *ex post* judicial remedy is cheaper for a business than implementing security precautions. This, as discussed later, becomes an important consideration in some contexts.

Melvin Jager's treatise on trade secret law states that "[t]here is no presumption that any particular idea conveyed to or acquired by an employee is a trade secret, unless the employer takes steps to maintain secrecy." Courts have found that "reasonable efforts" include requiring employees to sign nondisclosure agreements, placing restrictive legends on documents, requiring entrance and exit interviews with employees, and restricting access to areas where the trade secret is practiced to certain authorized employees. These precautions are particularly harsh on small businesses because small businesses foster teamwork and operate with a high degree of professional trust in an effort to promote innovation. By requiring nondisclosure agreements and restricting access, the collaborative environment that small businesses encourage is destroyed.

Courts always look at physical security measures in analyzing the reasonableness of efforts taken to guard the secrecy of the trade secret. The following security measures, when combined with other efforts, may be evidence of "reasonable efforts": locks and alarms on doors to the facility, security guards, use of clearance badges to enter restricted areas, physically locating the plant or facility in a geographically remote area, dividing the process into steps and dividing responsibility for the steps into separate departments, and using unnamed or coded ingredients.³⁷ Undertaking these security measures can be an extremely heavy burden on a small business because small businesses do not have the financial resources that larger businesses have to devote to security measures.³⁸

As mentioned earlier, courts usually do not examine whether it would be cheaper for the business to sue for trade secret misappropriation and receive an *ex post* judicial remedy than implementing "reasonable efforts." This is a

 $^{^{32}}$ 2 Louis Altman, Callman on Unfair Competition, Trademarks and Monopolies \S 14:26 (4th ed. 2004).

³³ Myrphy Kalaher Readio, Minnesota Developments, *Balancing Employers' Trade Secret Interests in High Technology Products Against Employees' Rights and Public Interests in Minnesota*, 69 Minn. L. Rev. 984, 1001 (1985).

³⁴ 1 MELVIN F. JAGER, TRADE SECRETS LAW § 5.05[2][a] (2000).

³⁵ Id.

³⁶ Readio, *supra* note 33, at 1003.

³⁷ Slaby et al., *supra* note 5, at 327–28 (listing locks, alarms, guards, badges and physically locating a plant in a geographically remote area as reasonable precautions); 1 ROBERT M. MILGRIM, MILGRIM ON TRADE SECRETS § 1.04 (2004) (discussing dividing the process into steps and using unnamed or coded ingredients).

³⁸ Readio, *supra* note 33, at 1001–02.

significant inquiry. One commentator suggests that protective measures are more efficient, stating that the "key issues in trade secret cases are mostly factual, and thus unsuitable for summary judgment, and... society incurs significant costs when identifying trade secrets in the absence of secrecy, [so implementing] security measures will usually be the cheaper method."³⁹ However, when the cost to litigate and costs to society do not outweigh the cost to implement security measures, it is only fair and efficient that the business be able to seek the cheaper judicial remedy. Requiring the expenditure of money and energy in protective measures when a cheaper method of protection exists may unnecessarily deter development of trade secret information because businesses may assume that the likelihood of recouping their expenditures is too low.

An important function of security measures is to signal to competitors and the public what information belongs to the business and to prevent others from using the information. It could be argued that without these signals the societal cost would become larger because the public would not know whether something is a secret, and that mistake could result in another business innocently using the secret. As the societal cost becomes larger, the more likely it is that judicial remedy will be the more expensive mode of protection. However, this argument is flawed in one way—the societal cost of not being able to identify the secret would be offset by the benefit of the secret being known and utilized by others. Others may use the secret without being sued and the information will remain a trade secret if it does not become "generally known."

The benefit to society could be lower prices due to increased efficiency achieved through use of the information by others.

The overall impact of the "reasonable efforts" requirement on small businesses is summarized as follows: (1) from the start, a small business is at a severe disadvantage in identifying the information on which it would desire trade secret protection before the information is exposed to the public, because costly expertise may not be available to help identify potential trade secret information; (2) "reasonable efforts" directed at employees, like requiring nondisclosure agreements and restricting access to certain areas, destroy the collaborative environment a small business tries to encourage; (3) physical security measures can be an extremely heavy burden on a small business, because small businesses do not have the financial resources to devote to security measures; and (4) seeking a judicial remedy may be the most efficient way to protect a small business's information and small businesses should be able to seek the cheapest protection possible. The three-step analysis recommended later in this Comment attempts to address all four of these adverse consequences experienced by small businesses.

³⁹ Note, *supra* note 2, at 474.

⁴⁰ UNIF. TRADE SECRETS ACT § 1(4)(i) (amended 1985), 14 U.L.A. 437–438 (1990).

IV. EXAMINATION OF THREE CASES DEMONSTRATING THE UNFAIRNESS THAT RESULTS WHEN SMALL BUSINESSES ARE EVALUATED UNDER THE CURRENT TEST

To better illustrate the adverse consequences felt by small businesses when courts utilize the current, rigid "reasonable efforts" analysis, this section examines three cases to show that severe unfairness has resulted when small businesses are not treated differently. All three cases involve small business plaintiffs who are seeking trade secret protection but are rejected by the courts. The four adverse consequences articulated in the previous section emerge in the following case discussions.

A. Colorado Supply Co. v. Stewart

The factual circumstances laid out in the *Colorado Supply* decision are fairly sparse. The plaintiff, Colorado Supply, was a small business that appealed the trial court's judgment to dismiss its claims, including a trade secret misappropriation claim. Colorado Supply claimed that David Stewart and Aspen Maintenance Supply, Inc. (Aspen Maintenance Supply) misappropriated Colorado Supply's trade secrets of customer lists, price lists, and product formulas. Stewart worked as an independent contractor sales representative for Colorado Supply until January of 1988. In January of 1988, Stewart left Colorado Supply's employ to work as a sales representative for Aspen Maintenance Supply, one of Colorado Supply's competitors. Stewart's new sales territory overlapped with the territory he worked for Colorado Supply.

The Colorado Court of Appeals listed factors that could be considered to determine whether a trade secret exists—one of which was the "precautions taken by the holder of the trade secret to guard the secrecy of the information"—and reiterated that the efforts must be "reasonable under the circumstances to maintain its secrecy." The trial court had concluded that none of the alleged trade secrets—customer lists, price lists or product formulas—were protectable, citing different reasons. The trial court found that Stewart developed the customer lists, there were no fixed prices to be included in the price lists, and Colorado Supply did not create the formulas. The trial court specifically held that the precautions taken to protect all three types of information were "only normal business precautions," but it did not explain nor justify the classification of normal business precautions.

The trial court noted that Colorado Supply could have, but did not, restrict disclosure of the information to certain employees, because even independent contractors were given the information.⁴⁵ Also, the sales representative agreement that Stewart signed while working for Colorado Supply did not put

⁴¹ Colorado Supply Co. v. Stewart, 797 P.2d 1303, 1305 (Colo. Ct. App. 1990).

⁴² Ld

⁴³ *Id.* at 1306.

⁴⁴ *Id*.

⁴⁵ *Id*.

on Stewart a duty not to disclose any of the relevant information. The appellate court found that because there was evidence to support the trial court's determinations, the trial court's determinations should not be disturbed on appeal.⁴⁶

By affirming the trial court's determinations, the court of appeals appears unduly harsh in analyzing Colorado Supply's "reasonable efforts" to guard the secrecy of the information. The court based its decision on the trial court findings that Colorado Supply did not limit the information to specific employees and did not require Stewart to sign a nondisclosure agreement. These two findings disregard the way in which small businesses operate. As discussed previously, small businesses operate under a high degree of trust between the employer and employees, and they disperse information among employees so that all can collaborate for a better product. ⁴⁷ In a small business, there may be little reason to distinguish an independent contractor from an employee. The *Colorado Supply* holding demonstrates that the destruction of the collaborative, small business environment, one of the potential adverse impacts previously identified, has actually resulted under the application of the current, rigid "reasonable efforts" evaluation.

B. Palin Manufacturing Co. v. Water Technology, Inc.

The factual background for the *Palin* case is very complex. Sanfred Turnquist, president of Palin Manufacturing Company (Palin), developed a paint sludge separator over three years at a cost of approximately \$100,000. Palin installed a prototype of its paint sludge separator in a General Motors (GM) plant in Wisconsin in 1976 to cure the plant's problem of paint overspray accumulating and clogging the plant's sewer system. The prototype was ineffective at curing GM's problem because the prototype's chemicals did not "detactify" or kill the paint.

In 1977, Turnquist met a sales representative from Detrex Chemical Company (Detrex), named Warren Pangburn, who was attempting to sell Detrex's detactifying chemicals to GM. GM's superintendent of maintenance, Robert Radtke, introduced Turnquist to Pangburn and "encouraged Pangburn to work with Turnquist to try to eliminate [the] problem." Pangburn's detactifying chemicals were more effective than the ones Palin used in the prototype, but Pangburn's chemicals did not eliminate the problem sufficiently. Still, Turnquist eventually hired Pangburn as a technical sales representative to market Palin's sludge separator. Store the sales representative to market Palin's sludge separator.

Radtke then introduced Turnquist to A. Allen Morr, the president of Water Technology (Water Tech), in the fall of 1977.⁵¹ Morr and Turnquist installed one of Water Tech's paint detactifying electrostatic treater units into the booth

⁴⁶ *Id.* at 1307.

⁴⁷ Readio, *supra* note 33, at 1003.

⁴⁸ Palin Mfg. Co. v. Water Tech., Inc., 431 N.E.2d 1310, 1312 (Ill. App. Ct. 1982).

⁴⁹ *Id*.

⁵⁰ *Id*.

⁵¹ *Id*.

at the GM plant occupied by Palin's prototype. The success of the combination between Palin's prototype and Water Tech's electrostatic unit prompted Turnquist and Morr to submit a joint marketing quotation to GM for the units. Pangburn, then a sales representative for Palin, delivered the joint marketing quote to GM along with two or three drawings detailing Palin's sludge separator in November of 1977. Shortly thereafter, Pangburn left Palin's employ and began working for Morr at Water Tech.

GM eventually purchased Palin's prototype. While Turnquist had not been actively marketing Palin's sludge separator, he was surprised to find that Water Tech was advertising a sludge separator device which contained many of the Palin device's characteristics in a trade magazine in December of 1979. GM subsequently purchased one of Water Tech's sludge separators.

At trial, Palin alleged that the defendants, Water Tech and Morr, misappropriated Palin's trade secrets—drawings for the paint sludge separator. The trial court ordered permanent injunctions to prevent defendants from manufacturing or selling Palin's sludge separator device. The trial court found the following facts: the paint sludge separator drawings were not marked confidential, Radtke was never put on notice that the drawings were confidential, Turnquist installed the prototype in an effort to sell the device, and Turnquist did not question the GM plant security. The paint sludge separator drawings were confidential, Turnquist installed the prototype in an effort to sell the device, and Turnquist did not question the GM plant security.

The defendants tried to show that GM did not promise to maintain the secrecy of Palin's prototype and its drawings or restrict access to the prototype because GM employees were never put on notice of the prototype's secrecy. Morr's testimony did not support this theory. Morr stated that access to the GM plant was limited and the functional parts of Palin's device were not visible even after climbing a ladder to view the device. Morr also testified that he had not used any of Palin's drawings to produce Water Tech's sludge separator. However, Pangburn testified that he had shown Morr original sludge device drawings he had created, but that these drawings were created only three weeks after leaving Palin's employ. Pangburn further stated that Turnquist never requested that Pangburn return his copies of Palin's device drawings. ⁵⁵

The appellate court stated that reasonable efforts "taken by the owner to guard the secrecy of the information [are] *determinative* of whether it is a trade secret." The appellate court held that Palin's drawing and sludge separator did not deserve trade secret protection because Turnquist took no steps to guard the confidentiality of the drawings by marking them confidential, installed the prototype in the GM plant, and provided the drawings to GM without any admonishment of confidentiality. Also, the appellate court found it important that Turnquist did not ensure access to the prototype was restricted or request that GM protect the security of the prototype. Turnquist discussed the sludge separator with several people and showed them drawings in an effort to eventually sell the device.

⁵² *Id*.

⁵³ *Id.* at 1313.

⁵⁴ *Id*.

⁵⁵ *Id.* at 1313–14.

⁵⁶ *Id.* at 1314 (emphasis added).

The appellate court's holding is too demanding. Everything Turnquist did was directed towards improving and eventually selling the product. Turnquist only installed the prototype to test it and adjust it according to developments. Turnquist spoke with and disclosed his drawings to people he thought would provide insight into improving the prototype and with those whom GM personnel told him to speak and share information. Turnquist was in some ways trying to create the collaborative work environment that small businesses are known to foster. If Turnquist had refused to supply the drawings to or speak with the people GM suggested, this collaborative environment would have been destroyed.

Turnquist did not require GM to restrict access to the prototype, but Turnquist was trying to sell the device to GM. Furthermore, Morr testified that access was restricted in the GM plant, and using a ladder to reach the prototype was not sufficient to learn of its inner-workings. As mentioned in the previous section, physical security measures can be a heavy burden on small businesses, like Palin, which have limited financial resources to implement the measures. This burden is even more crushing when the trade secret device is located in another business's plant, especially when the small business is trying to create a positive relationship with this other business. GM may have continued good business relations if Turnquist had suggested that protective steps be implemented in the plant to protect the separator device, but the possibility that GM would have cooled towards Palin was probably too great for Turnquist because GM was his only customer for the device at that point.

Most of the circumstances the court pointed to in rejecting trade secret protection were not within Turnquist's power to control, unless he required GM and others involved to sign contracts which would have potentially lead to a breakdown in negotiations. Turnquist hired Pangburn as Palin's sales representative only for Pangburn to jump ship within months, taking the drawings and his special knowledge of the device with him to Water Tech. Turnquist did not require that Pangburn return the drawings. However, even if Pangburn had returned the drawings, he still would have had special knowledge to allow him to reconstruct the drawings and device.

The best and cheapest way for Palin, a small business, to protect its trade secret may have been to seek judicial remedy, especially since the prototype was housed in another business's—the potential buyer's—plant, and the potential buyer recommended that Turnquist turn over the information. The appellate court never addressed whether Palin's best option for trade secret protection would have been seeking a judicial remedy. The appellate court should have addressed, or at least acknowledged, this important consideration.

C. Jackson v. Hammer

In *Jackson v. Hammer*, the plaintiff, Mr. Jackson, bought a hobby shop called the Whistle Post from the defendants, Mr. and Mrs. Hammer.⁵⁷ The defendants had opened another hobby shop in the state of Illinois three years prior to opening the Whistle Post. Through the other store, the defendants had

⁵⁷ Jackson v. Hammer, 653 N.E.2d 809, 811 (Ill. App. Ct. 1995).

developed a customer list. When the defendants bought and opened the Whistle Post, they developed a customer list for the store by using information cards left in the Whistle Post by the previous owner, and by asking customers to fill out blank cards when they came into the Whistle Post. The Hammers created a master customer list including customer information from both stores and stored it on their computer.⁵⁸

The Hammers sold the Whistle Post to Jackson in 1989.⁵⁹ The sales agreement contained a noncompete clause and a provision for the transfer of all intangible assets of the business. At the time of the sale, Jackson was aware of the customer cards and checked to see if the file box for the cards was in the store at the time of closing. There was some evidence that Jackson was aware that customers could be notified by the customer list, but Jackson's knowledge about the customer list was not clear.⁶⁰

Shortly after the sale, the Hammers sent an advertising flyer to everyone on the master customer list—representing customers from their other store and the Whistle Post. ⁶¹ Jackson learned that the Hammers had mailed these flyers from a Whistle Post customer who had received one. In response, Jackson had his attorney write a letter to the Hammers explaining that their flyers were violating their contract. The parties met to discuss the situation and expressed their confusion. The Hammers promised to separate the Whistle Post customers from their master list and promised not to advertise within the noncompete area. ⁶² At some point, Jackson transferred all the names on the Whistle Post customer list to his personal computer, to which only two people had access, and took the file box containing the customer cards to his home for safe-keeping. ⁶³

Two years later, once the noncompete clause had expired, the Hammers opened a hobby shop in the same city as the Whistle Post. ⁶⁴ The Hammers advertised the new shop by mailing flyers to everyone on their master customer list, including those people they had separated from the list upon Jackson's request two years earlier. Jackson again learned of the flyer from a Whistle Post customer who had received one, and contacted the Hammers. Jackson claimed that the Hammers had sold him the customer list and they could not use it even though the noncompete clause had officially expired. The Hammers claimed that they had inadvertently mailed the flyers to everyone on their master list. Jackson filed a complaint shortly after learning of this second group of flyers, asserting multiple counts, including that "the Hammers' acquisition and use of the Whistle Post customer list . . . constituted a 'misappropriation'" of his trade secret. ⁶⁵

⁵⁸ *Id.* at 812.

⁵⁹ *Id*.

⁶⁰ *Id*.

⁶¹ *Id*.

⁶² *Id.*

⁶³ *Id.* at 816.

⁶⁴ *Id.* at 812.

⁶⁵ *Id.* at 812–13.

The Appellate Court of Illinois, Fourth District, relied on an Illinois statute that codified two requirements for trade secret protection—the business must have exclusive ownership of the information, and the business must make reasonable efforts to protect the secrecy of the information. 66 Jackson could not satisfy the first requirement because he never had exclusive ownership of the master customer list. The appellate court then turned to the second requirement and specifically held that "[d]espite the fact that plaintiff... has a small business, he nonetheless has not taken reasonable steps to protect the secrecy of the customer lists."⁶⁷ The appellate court found that Jackson had not made "reasonable efforts" based on the following findings: Jackson had made an effort to get a copy of the customer list for his own use, but not necessarily for his exclusive use; Jackson did not discuss the confidentiality of the customer lists with his employees; Jackson first saw the customer list out in the open when the Hammers owned the shop; Jackson trusted the Hammers to delete the appropriate names, but he did not give them any specific instructions on which names to delete; the Hammers knew most of Jackson's customers, and yet, they were one of Jackson's competitors; Jackson's customer lists were not kept under lock and key; and the Hammers had filed the customer list with the court during discovery and it remained part of the public court file without objection.⁶⁸

The appellate court in *Jackson v. Hammer* specifically identified Jackson's shop as a small business, but then went on to treat it under the current, harsh "reasonable efforts" analysis. Illinois courts have carefully noted that "reasonable steps for a two or three person shop may be different from reasonable steps for a larger company." Although Illinois case law states that small businesses should be treated differently, that acknowledgment has not developed or been articulated into a different analytical framework.

All four of the adverse consequences for small businesses discussed in the preceding section are found in the *Jackson* case. First, small businesses, like Jackson's Whistle Post, are at a severe disadvantage in identifying what constitutes a trade secret. There is disagreement among courts and scholars as to whether customer lists are even the type of subject matter that trade secret protection should protect and was created to protect. It is reasonable to assume that Jackson thought, by inclusion of the noncompete clause and the contract provision transferring all intangible assets of the business to him, that he identified the customer lists as information he desired. Jackson's actions suggest that he trusted the Hammers to disclose any of the intangible assets, including a customer list, and turn them over to him. However, Jackson did not

⁶⁶ *Id.* at 815.

⁶⁷ *Id.* at 816.

⁶⁸ Id. at 816–17.

⁶⁹ Elmer Miller, Inc. v. Landis, 625 N.E.2d 338, 342 (Ill. App. Ct. 1993) (noting that a small business's "reasonable efforts" may be different from the efforts deemed reasonable when made by a large company and citing to another Illinois appellate court decision, *Gillis Associated Indus.*, *Inc. v. Cari-All, Inc.*, 564 N.E.2d 881 (Ill. App. Ct. 1990); noting that in *Gillis* a multi-million dollar corporation was denied trade secret protection on its customer information because its secrecy efforts were deemed insufficient).

⁷⁰ James Pooley, Trade Secrets § 4.02[2][a] (Supp. 2000).

have the expertise to determine if the information was protectable, and he was not likely to know otherwise that the information was protectable because there is confusion as to whether customer lists can even receive trade secret protection. Furthermore, information is protectable under trade secret only if the information gives the business an advantage over its competitors; Jackson was not in a position to know if entities had access to the customer list.

Second, the Jackson court found that Jackson's failure to discuss the confidentiality of the customer list with his employees was a significant indication that reasonable efforts were not taken to ensure the secrecy of the customer lists.⁷¹ However, Jackson ran a small retail shop with few employees and probably wanted to foster a close connection between his employees and his customers. The atmosphere in a retail business is different from the atmosphere of a manufacturing business that creates technology in many respects, but both types of businesses may involve employees helping to compile or improve a trade secret. The employees in a retail shop, like the Whistle Post, encourage customers to fill out the customer information cards (compiling the trade secret) and to correct improper or out-of-date information (improving the trade secret). To restrict employee access to the customer list of a small retail shop would interfere with the compiling of and improvement of the trade secret. Jackson could not reasonably have restricted employee access to the customer list without injuring or limiting the business. Requiring his employees to sign nondisclosure agreements would be expensive (to hire an attorney and pay them to draft a binding agreement) and could affect the overall morale of the salespeople.

Third, physical security measures can be too expensive for small businesses to afford. The customer information was contained on a computer and in a file box full of customer information cards. There was evidence that Jackson made some effort to physically secure the customer list by transferring the list to his computer, to which only two people had access, and taking the customer card file box home with him. ⁷² The *Jackson* court found these efforts unreasonable because the customer list was not kept under lock and key.⁷³ Jackson did not lock the computer up in a closet, and there is no evidence that he used a special password to access the customer list on the computer. The computer and customer list were only accessible by two people—Jackson and Jackson's father. The computer appears reasonably secure. Jackson took the file box of customer cards to his home, where it is reasonable to assume the cards would be safe from a competitor's prying eyes. The physical security measures taken by Jackson, although not rising to the level of "under lock and key," appear reasonably calculated to keep the information secret.

Fourth, Jackson's cheapest and most effective mode of protection for his customer lists may have been judicial remedy. The Hammers' conduct sending the first flyer into the noncompete area, not clearly disclosing the existence of a master customer list, separating (but not deleting) the Whistle Post customer names, and waiting only a few months after the noncompete

 ⁷¹ *Jackson*, 653 N.E.2d at 816.
 72 *Id*.

⁷³ *Id.* at 817.

clause expired to enter the market to directly compete with Jackson and the Whistle Post—suggests that the Hammers would engage in questionable behavior to compete with Jackson. In light of the Hammers' disingenuous behavior, Jackson could not have reasonably anticipated the problems that arose, and was not in a position to take various protective measures. In addition, a judicial remedy may have been Jackson's best protection from the Hammers' questionable practices because Jackson's efforts to protect and maintain the customer list would have been worthless as long as the Hammers lied about the existence of a master customer list and then used the list to compete with Jackson. Unfortunately, the *Jackson* court never addressed the possibility that a judicial remedy may have been more efficient.

Under the *Jackson* court's "reasonable efforts" analysis, Jackson's efforts were evaluated under an unduly harsh test. Unfortunately, most courts (too many) employ an inflexible "reasonable efforts" test that can result in small businesses being required to satisfy criteria that are unreasonable in light of the small business's restraints. All three of the cases discussed in this section show that the current, rigid test is not fair to small businesses. The following section will recommend a three-step analysis to evaluate a small business's "reasonable efforts" which attempts to avoid the unfairness exhibited in the *Colorado Supply, Palin Manufacturing*, and *Jackson* cases.⁷⁴

V. RECOMMENDATION OF A THREE-STEP ANALYSIS TO EVALUATE A SMALL BUSINESS'S "REASONABLE EFFORTS" AND POTENTIAL CRITICISMS ADDRESSED

In previous Parts, this Comment has exposed exactly what is wrong with the current, rigid "reasonable efforts" test, as applied to a small business. Now, the discussion shifts to what analysis should be utilized instead. The three-step analysis recommended attempts to cure the wrongs inflicted on small businesses under the current analysis. The three-step analysis is then used to reanalyze the previously discussed three cases which illustrate the harms from using the current analysis. The last subsection addresses two potential criticisms to the proposed three-step analysis.

A. Step One: Determine Whether the Small Business was Reasonably Able to Identify the Information as a Trade Secret

Courts should first determine whether the small business seeking trade secret protection was able to identify the information as requiring or being subject to trade secret protection. If the small business was reasonably able to identify the information as a potential trade secret, the small business will have a heavier burden to show why it did not employ protective measures to maintain the secrecy of the information. If the small business was not reasonably able to identify the information as a potential trade secret, the

⁷⁴ Colorado Supply Co. v. Stewart, 797 P.2d 1303 (Colo. Ct. App. 1990); Palin Mfg. Co. v. Water Tech., Inc., 431 N.E.2d 1310 (Ill. App. Ct. 1982); Jackson v. Hammer, 653 N.E.2d 809 (Ill. App. Ct. 1995).

burden on the small business to show that its efforts were reasonable will be lessened.

According to the Restatement of Torts, trade secret protection is afforded only to certain types of information used in a business which give the business the "opportunity to obtain an advantage over competitors who do not know or use it." A small business owner may not be able to identify information as worthy of trade secret protection if she does not research or get an attorney's opinion determining whether the information is the type falling within the realm of trade secret protection. The difficulty in identifying information worthy of trade secret protection could lead a small business to attempt to protect every piece of information. This "protect everything just in case" attitude would lead to inefficiency, and it could eventually lead to higher prices for customers or business failure if the business becomes unable to compensate for the inefficiency. The opportunity for business failure is daunting when we remember that trade secret misappropriation, like information theft, occurs mostly in smaller companies whose annual sales total less than \$11 million.

Also, a small business owner may not know if her competitors know of, or are using, the potential trade secret information. Independent development by others is not prohibited under trade secret law, so others in the industry may develop and try to keep the information secret in hopes of also maintaining trade secret protection. A small business owner could assume that everyone in the industry is using the information or that only a few of the business's competitors could be using it. For instance, if the small business owner knew directly of competitors' or other companies' use of the information in the industry, this may lead the small business owner to assume that the information is not sufficiently unknown to constitute a trade secret. Courts should consider this.

However, the protections for small businesses should be limited in some circumstances. For instance, not all trade secrets are reverse-engineerable. An example given for a trade secret that cannot be reverse engineered is Coca-Cola's unique combination of ingredients. If the trade secret is not able to be reverse engineered, it would be reasonable for the trade secret owner to assume the information is not generally known and protect it appropriately.

An important factor in this step of the analysis is whether an attorney was consulted to determine if trade secret protection was appropriate, and what the attorney advised the small business to do in response. There is no statistical data on the number of small businesses that have in-house counsel who could be consulted on whether the information is protectable under trade secret law, but it is fair to assume the percentage is fairly small. If a small business consulted an attorney who suggested that the information was protectable under trade secret law, the small business would be given the choice of whether to make efforts rising to the level of "reasonable" to maintain the secrecy of the information and could not claim ignorance (that it did not know trade secret

⁷⁵ RESTATEMENT OF TORTS § 757, cmt. b.

⁷⁶ Greenlee, *supra* note 14, at 31.

Fraumann & Koletar, *supra* note 30, at 64.

⁷⁸ *Id*

protection would have been available). Where the small business seeks out legal advice about potential trade secret protection but the attorney suggests that the small business's information is not worthy of trade secret protection, the small business will not waste time or money in protecting the information.

In contrast, if a small business did *not* seek out legal advice as to whether the information was potentially protectable, it may be inferred that they were not interested enough in protecting the information (the information was not important enough to the business) to investigate possible modes of protection for the information. The result of this factor may be to encourage small businesses to seek legal opinions as to whether information is trade secret protectable. The only drawback to this incentive is that legal consultation may be expensive, but it could potentially save substantial time and money if it prevents trade secret misappropriation disputes and litigation.

B. Step Two: Cost-Benefit Analysis Taking Into Account Financial Resources and Employee Goodwill

The second step of the recommended analysis addresses two of the major adverse consequences of the inflexible, current "reasonable efforts" analysis—the destruction of the collaborative environment necessary in small businesses and the physical security measures which are overly burdensome for small businesses that have limited financial resources. The second step in the recommended inquiry is that courts should perform a cost-benefit analysis in which the costs of the protective measures, both monetary costs and goodwill costs, are compared to the amount of benefit or security a potential trade secret owner may gain with trade secret protection. The cost-benefit analysis should not focus exclusively on the *monetary* costs and benefits. Instead, the cost-benefit analysis should focus on all costs and benefits to the small business, some of which may be monetary and others of which may be intangible, such as impacting the collaborative environment.

The monetary cost-benefit aspect should examine the monetary costs for the physical security measures, such as providing locks on doors, hiring security guards, locating a plant in a geographically remote location, and dividing a process into separate steps and departments. Also, the monetary cost of notifying employees of the confidentiality of the information should be considered. Examples of monetary costs for putting employees on notice may include the following: the attorney's fee for drafting effective nondisclosure agreements, the cost of placing restrictive legends on documents, and monetary and productivity costs of executing entrance and exit interviews.

There are two monetary benefits of implementing the security measures and putting employees on notice. First, a court may award lost profits and possibly attorney fees if the business can prove it made "reasonable efforts" to maintain the secrecy of the information. Second, the business may benefit from profits earned during the period when secrecy is successfully maintained. Both the judicial award and profits during secrecy are potentially quite large, but the judicial award is the focus of this Comment because the "reasonable efforts" analysis is related to the judicial award. The importance and uniqueness of the

information to the small business itself and the entire industry may significantly impact the size of the judicial award.

The costs to goodwill can affect the monetary costs and vice-versa, but goodwill costs are those that affect the morale of the employees and potential customers. Small businesses operate with a high degree of professional trust and foster teamwork to promote innovation. When certain employees are restricted from areas of the facility, required (sometimes as a condition of employment) to sign nondisclosure agreements, and prohibited from collaborating with fellow employees, the employees may feel they are not a part of a group working toward a goal. The employees may also feel like the business owner does not trust them. These feelings could create a secretive, acrimonious environment resulting in employees jumping ship in search of a better (more supportive) work environment. The effect can be decreased productivity and increased employee turnover.

Goodwill benefits include the following: employees feeling confident in their role within the business or process, employees feeling their work is important enough to be entrusted with important information, and an overall feeling that the business is progressing and creating important trade secrets. These benefits can in turn increase productivity and decrease employee turnover by inciting loyalty. The goodwill benefits may not be as strong when the small business has only two or three employees because the employees know their roles, realize their importance, and are interested in the business's progress.

It may be difficult to designate a specific dollar amount to correspond to a decrease in goodwill. However, an estimated decline in efficiency or productivity, determined by a percentage, may be appropriate. For example, if the employers were required to sign non-disclosure agreements and prohibited from working with others on large, collaborative projects, the goodwill may be gauged as decreasing overall morale and efficiency at 45 percent, depending on the court's findings.

C. Step Three: Determine Whether Seeking a Judicial Remedy is the Cheapest and Most Efficient Way to Protect the Trade Secret

All businesses, but especially small businesses, should be able to protect their trade secrets as cheaply and efficiently as possible. Requiring small businesses to act inefficiently in order to seek trade secret protection will unnecessarily deter development and protection of information. Small businesses have already been forced to seek trade secret protection instead of patent protection, due to increased patent invalidation in recent years. Small businesses should be given the same chance at trade secret protection (and other forms of protection) that medium and large businesses have.

For some small businesses, seeking a judicial remedy after the trade secret information has been exposed to the public may be the best way to protect the trade secret information. Requiring small businesses to expend money and

⁷⁹ Readio, *supra* note 33, at 1003.

Note, supra note 2, at 461.

energy to preserve trade secret protection when a cheaper route, like a judicial remedy, exists may deter development of trade secret information because businesses may assume that the likelihood of recouping some of those expenditures is too low to warrant development. A judicial remedy will rarely be the best or most efficient way to protect the information because trade secret cases are highly factual and unsuitable for summary judgment determination, and society incurs significant costs in identifying trade secrets once they have been exposed. The rarity of this situation, however, does not negate consideration of it.

D. The Three-Step Analysis Applied to the Three Cases Previously Discussed

The three cases previously discussed—*Colorado Supply*, *Palin Manufacturing* and *Jackson*⁸²—likely would have turned out differently if analyzed under the recommended three-step analysis instead of the current test. A brief re-analysis of the cases, using the recommended three-step analysis, will help illustrate this point. The more detailed case discussions can be found in Part IV.

1. Colorado Supply Co. v. Stewart

In *Colorado Supply*, the court of appeals affirmed the trial court's dismissal of Colorado Supply's trade secret claim for two main reasons: Colorado Supply did not require Stewart, an independent contractor, to sign a nondisclosure agreement, and Colorado Supply did not limit the information to specific employees. ⁸³ Under the first step of the recommended analysis, the trial court should have determined whether Colorado Supply was reasonably able to identify the information as a trade secret. There is no mention in the case facts that Colorado Supply had an attorney on staff or consulted an attorney or outsider who could help identify the information as a trade secret, and there is no mention whether the company believed others in the industry had independently created the customer lists and formulas. The court should have required evidence on each of these facts. Without evidence on those facts, the first step cannot be properly examined.

Under the second step, the Colorado Supply trial court should have performed a cost-benefit analysis, but instead, the trial court only examined two factual findings to hold that the efforts were not reasonable without weighing the costs of the efforts against the benefits. If the trial court had weighed the costs against the benefits, the court would have realized that requiring independent contractors, like Mr. Stewart, to sign nondisclosure agreements and limiting the information to specific employees could have destroyed the collaborative environment that Colorado Supply tried to foster. A fraction or percentage may have been used to gauge the cost to goodwill in this case. This substantial cost to goodwill should have been weighed against the benefits—

⁸¹ *Id.* at 474

⁸² Colorado Supply Co. v. Stewart, 797 P.2d 1303 (Colo. Ct. App. 1990); Palin Mfg. Co. v. Water Tech., Inc., 431 N.E.2d 1310 (Ill. App. Ct. 1982); Jackson v. Hammer, 653 N.E.2d 809 (Ill. App. Ct. 1995).

⁸³ Colorado Supply Co., 797 P.2d at 1306.

like potentially being awarded lost profits or attorney fees, or the employees feeling confident in the business. The result, one could speculate, may have shifted if the court found that the cost to goodwill was too much for the small business in light of the potential benefits.

Under the third step, the Colorado Supply trial court should have determined whether seeking a judicial remedy after the secrets were exposed was the most efficient way of protecting the formulas and customer lists. The trial court and court of appeals ignored this step's inquiry completely. As discussed previously, the circumstances in which a judicial remedy will be more efficient are rare, but more evidence or at least discussion of the possibility may have been enlightening.

Re-analysis of *Colorado Supply* with the three-step analysis shows that Colorado Supply's efforts appear more reasonable under the circumstances than the trial court acknowledged. The second factor, as expected, is the dominant factor under the circumstances. Application of the three-step analysis would not have necessarily changed the trial court's holding or the court of appeals' holding, but it would have focused the courts' attention on the precarious situation a small business is in when trying to preserve trade secret protection.

2. Palin Manufacturing Co. v. Water Technology, Inc.

In *Palin Manufacturing*, Turnquist did not require GM to restrict access to the prototype, he disclosed his sludge separator drawings to people with whom GM told him to speak, and he did not mark the drawings as confidential. ⁸⁵ The trial and appellate courts held that Turnquist's (Palin's) efforts were not reasonable under the circumstances to preserve trade secret protection. If the courts had used the recommended three-step analysis, the holdings likely would have been different.

Under the first step, the courts should have determined whether Palin (and Turnquist as the owner) was reasonably able to identify the information as a trade secret, but the courts did not address this factor. The evidence suggests that Palin was reasonably able to identify the information as a trade secret because Turnquist had created a prototype which attempted to correct a specific problem GM was experiencing. Turnquist should have realized, even without counsel from an attorney, that the information or prototype was not generally known and valuable, because GM was looking for a solution to its paint problem and the Palin device was the only solution to the problem being tested. This factor weighs against Palin.

The courts only examined the potential benefits of Palin's efforts to maintain the secrecy, and did not weigh those benefits against the costs to Palin, as the second step requires. Palin failed to mark the drawings as confidential, but the drawings were only given to people GM recommended or to Palin's sales associates, like Pangburn. The drawings were not freely

⁸⁴ *Id.* at 1303.

⁸⁵ Palin Mfg. Co., 431 N.E.2d at 1313–14.

⁸⁶ *Id.* at 1312, 1314.

disclosed. ⁸⁷ The cost of placing confidentiality warnings on the drawings would have been inexpensive, but not disclosing the drawings to GM and people GM suggested may have cost Palin the sale of the prototype. GM wanted the prototype to be improved and probably would not have continued relations with Palin if Palin did not follow GM's suggestions. Also, Palin failed to require GM to restrict access to the prototype, but Palin was not in a position to *require* GM to do anything. Palin was trying to negotiate a deal with GM, and it is likely that negotiations would have broken down if Palin had requested GM to restrict access to the prototype. Regardless, there was evidence that the prototype was housed in a restricted area of the GM plant. The prototype was also not easily seen (a ladder was required to reach it), therefore the benefit of any protection would have been minimal. ⁸⁸ This step suggests that Palin's efforts were reasonable under the circumstances. This would outweigh the result of the first step.

Under the third step of the analysis, the most efficient way for Palin to protect its trade secret may have been to seek a judicial remedy. Unfortunately, neither court addressed this step. A judicial remedy may have been Palin's most efficient method to protect the drawings and information because the cost of protectionist measures may have been high (Turnquist turned over the drawings to those people GM recommended and the prototype was in the potential buyer's plant). This step would require more evidence, but it could prove an important factor.

Re-analysis of *Palin Manufacturing* using the three-step analysis shows that Palin's efforts should have been held reasonable under the circumstances. Although Palin was easily able to identify the information as a potential trade secret, the cost-benefit analysis shows that the cost of losing a sale to GM (a large corporation with multiple plants) would definitely outweigh the benefits of safeguarding the sludge separator as a trade secret. Also, a judicial remedy may have been Palin's best method of protecting the trade secret.

3. Jackson v. Hammer

The *Jackson* court held that Jackson's efforts were not reasonable to protect the secrecy of the Whistle Post customer list. ⁸⁹ The court relied on, among other things, the following facts: the customer lists were not kept under lock and key, Jackson's employees were not specifically told to keep the customer list confidential, and Jackson trusted the Hammers to delete the appropriate names from their customer list. ⁹⁰ Re-analysis under the recommended three-step analysis shows that Jackson made reasonable efforts to maintain the secrecy of the customer list.

Under the first step, the court should have determined whether Jackson was reasonably able to identify the customer lists as a trade secret. There is some disagreement among legal scholars as to whether customer lists are eligible for trade secret protection, which would make it more difficult for

⁸⁷ *Id*.

⁸⁸ *Id.* at 1313.

⁸⁹ Jackson v. Hammer, 653 N.E.2d 809, 811 (Ill. App. Ct. 1995).

⁹⁰ *Id.* at 816–17.

Jackson to identify the customer lists as a trade secret. Also, there is evidence that Jackson sought an attorney's assistance only after the Hammers sent a flyer to Jackson's customers, but the attorney did not help Jackson to identify the customer lists as trade secrets before the flyer incident. This step seems to suggest that Jackson was not reasonably able to identify the customer list as a trade secret when he purchased the Whistle Post from the Hammers.

The *Jackson* court did not perform a complete cost-benefit analysis like the one recommended. Instead, the court focused on the facts that the customer lists were not kept under lock and key and that the employees were not put on notice that the customer list was confidential. The customer list was not kept under lock and key, but it was stored on only one computer, to which only two people had access, and in a box of cards Jackson kept at home. The cost of locking a customer list in a filing cabinet or "locking" it in a file on a computer are relatively low, but Jackson used other low-cost modes of protection which appear to be reasonable substitutes for a lock and key.

The court held that the employees were not put on notice of the confidentiality of the customer list, but they did not have access to it because the information was kept on the computer mentioned previously and in a box at his home. Jackson wanted his employees to try to get customers to fill out the customer information cards used to create and supplement the customer list, so he could not completely restrict his employees' access to the cards. It was unnecessary and impractical to specifically tell the employees that the customer list was confidential, since the employees did not have access to it.

Under the third step, the *Jackson* court should have determined if Jackson's most effective method of protecting his customer lists would have been judicial remedy. The Hammers anticipated competing with Jackson as soon as the noncompete agreement expired and misled Jackson on different occasions. Jackson could not reasonably have foreseen and prepared for the Hammers' dubious behavior, so a judicial remedy may have been Jackson's most efficient remedy. More evidence would be helpful to determine if a judicial remedy was Jackson's most efficient remedy.

The *Jackson* holding likely would have been different if the recommended three-step analysis had been utilized by the court instead of the current, stringent test. It appears that Jackson was unlikely to reasonably identify the customer list as a trade secret, and the costs of protecting the information would outweigh any benefit. A judicial remedy may have been the best option.

Re-analysis of the three cases shows that the three-step analysis helps courts to focus on the unique features of small businesses. The three-step analysis could be applied to any sized business, but seems particularly effective for evaluating the "reasonable efforts" of small businesses. The following Part explains what the recommended analysis tries to accomplish and addresses two possible criticisms.

⁹¹ *Id.* at 812.

⁹² *Id.* at 816.

⁹³ Ia

⁹⁴ Id. at 812–13.

E. What the Recommended Three-Step Analysis Accomplishes and Potential Criticisms

The recommended three-step analysis attempts to level the playing field for small businesses, so that small businesses are given a fair opportunity at trade secret protection. The recommended analysis was articulated to address all four of the adverse consequences observed in the *Colorado Supply*, *Palin*, and *Jackson* cases. ⁹⁵ This Comment will address two potential criticisms of the recommended three-step analysis.

First, bright-line standards are created sparingly to reflect the varying shades of gray in most factual situations. A potential criticism of the recommended three-part analysis may be that creating a bright-line analysis for small businesses with the size parameters clearly set by the Small Business Administration, discussed in Part II, unfairly discounts medium-sized businesses or businesses which nearly qualify as small businesses (for example a manufacturing industry business with 510 employees exceeds the Small Business Administration's cap for a small business in the manufacturing industry at 500 employees). This criticism is easily overcome.

Although the three-part analysis recommended focuses on small businesses, the three-step analysis could be used to evaluate businesses of all sizes. The first and third steps in the three-step analysis (determining whether the small business was reasonably able to identify the information as a trade secret and whether seeking a judicial remedy after the secret has been exposed is the best way to protect the trade secret) may not be as significant in the larger business context. For example, larger businesses are probably more likely to have counsel (in-house or on retainer) to consult when identifying potential trade secrets. Also, as discussed earlier, the circumstances in which seeking a judicial remedy is the best way to protect the trade secret are very rare overall.

The second step of the three-part analysis, which requires a court to perform a cost-benefit analysis taking into account the costs of protection, including employee goodwill, is really the critical step in the analysis. This second step would be performed much the same way when analyzing any size business. The monetary and environmental costs would be very similar, but the costs would probably not appear to overburden a large business. To illustrate, under the second step the proportion of income that would have to be devoted to security efforts by a small business is probably significantly less than the proportion that would have to be devoted by a large business.

The effect of applying the three-step analysis to mid- and large-sized businesses is basically that the first and third steps fall away and the second, critical step remains the same. The three-step analysis is recommended to directly address the harsh results that have been observed under the current, rigid analysis utilized by courts, but it can also be used to arrive at a fair result in evaluating the "reasonable efforts" of larger businesses. The three-step

⁹⁵ Colorado Supply Co. v. Stewart, 797 P.2d 1303 (Colo. Ct. App. 1990); Palin Mfg. Co. v. Water Tech., Inc., 431 N.E.2d 1310 (Ill. App. Ct. 1982); Jackson v. Hammer, 653 N.E.2d 809 (Ill. App. Ct. 1995).

analysis, though drawing a bright-line for small businesses, could be applied across the range of size classifications.

Second, some critics may suggest that a separate analysis is not needed for small businesses because courts currently use a totality of the circumstances standard of analysis. This criticism falls on its face in practical application. Courts begin a "reasonable efforts" discussion by stating that they use a totality of the circumstances standard to evaluate the "reasonable efforts" taken by a business, but in reality the courts do not acknowledge the special needs and resource limitations of small businesses which should be considered under the totality of the circumstances standard. This was evidenced in the *Jackson* case discussed in Part IV where the court explicitly mentioned that Jackson was a small business owner, but the court went on to apply the current, rigid analysis. The recommended three-step analysis is proposed to draw special attention to the unique needs and resources of small businesses which courts' applications of the current, rigid analysis fail to acknowledge in practice.

VI. CONCLUSION

Small businesses deserve an equal opportunity at trade secret protection, which they are now seeking more often in response to increases in patent invalidation and business information theft. Because the "reasonable efforts" factor is the determinative factor in the trade secret analysis, an equal opportunity at trade secret protection requires an equal opportunity to satisfy the "reasonable efforts" factor. The three-step analysis recommended in this Comment gives small businesses those equal opportunities and effectively addresses all four adverse consequences felt by small businesses under the current, rigid analysis. The three-step analysis better identifies and focuses on the categories within the totality of the circumstances standard: a standard courts purport to use but in reality do not use.

In conclusion, the three-step analysis is as follows: (1) determine whether the small business was reasonably able to identify the information as a trade secret, (2) perform a cost-benefit analysis taking into account the financial resources and employee goodwill, and (3) determine whether seeking a judicial review is the cheapest and most effective way to protect the trade secret. The three-step analysis is recommended to be applied to small businesses as defined by the size parameters set by the Small Business Administration. However, the three-step analysis could be applied to businesses of all sizes.

⁹⁶ See Jackson, 653 N.E.2d at 816.