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The benefit: a well-written entrepreneurial business plan is to an entrepreneur what a midwife is to an expecting mother

Brent Mainprize and Kevin Hindle

The evaluation of new ventures often involves two key aspects of entrepreneurial business plans: how best to write them and how best to rate (evaluate) them. Ultimately the performance of the venture should be the definitive criterion of quality. Surprisingly, the writing, rating and performance effects of entrepreneurial business plans (EBPs) comprise three related but under researched areas. This article empirically tested principles for writing and rating entrepreneurial business plans to draw inferences on how to improve the private equity investment evaluation process. A simplified perspective of General Systems Theory guided our empirical investigation of the input and outcome of the VC investment decision. Our empirical investigation reveals that entrepreneurial business plans that comport with the writing principles from the literature improve a new venture's likelihood of success.

The screening and evaluation of business plans submitted by entrepreneurs is a major component of the decision-making process employed by venture capitalists (VCs) when they decide whether to invest in a new venture or not. As the principal tool of the screening decision, VCs rely heavily on the entrepreneurial business plan (Roure and Keeley [1990]; Hindle [1997]; Zacharakis and Meyer [2000]). An entrepreneurial business plan is considered the primary planning document for a new venture, defined as "the formal argument used to secure, from prospective investors, resources for a proposed entrepreneurial process" (Hindle [1997: 22]).

VCs employ a variety of criteria when evaluating potential investments in the screening phase (MacMillan, Siegel et al. [1985]). The process of entrepreneurial business plan (EBP) screening in the venture capital field can best be characterized by the "vital few and trivial many rule" (Pareto [1896]). Pareto's Principle, the 80-20 rule, suggests that only 20% of the companies that VCs invest in generate 80% of the total benefit to the fund (Zider [1998]). The VC challenge is to distinguish the right 20% from the trivial many by using an effective evaluation process to screen out good investments from bad. Henceforth, the terms "screening" and "evaluation" are used as virtual synonyms.

Entrepreneurial Business Plan is the Key Decision Input

There is a small, but growing, body of research that details many desirable attributes and qualities that, at a general level, any entrepreneurial business plan should contain. It is a reasonable proposition that this research, and any principles it may contain, can and should provide the basis for a systematic approach to both writing and evaluation of entrepreneurial business plans. Despite this, the majority of EBP writing and evaluation is unsystematic--if "systematic" be taken to mean "based on empirical evidence and developed theory". The vast majority of the abundant 'how to write a successful business plan' literature is not research based (Hindle [1997]). It is a

literature where unsupported, espoused criteria of authors far outweigh formal application of the known attributes of successful ventures (Hindle and Mainprize [2002]).

Deal Screening Process is Capricious

VCs reported devoting eight to 12 minutes, on average, to evaluate a business plan (Sandberg [1986]). Despite the relatively short analysis time devoted to each plan, Zacharakis and Meyer [2000: 340] concluded that "decision aids are under used in the VC industry" and that only 24% of VCs interviewed use some sort of checklist or tool to aid in the evaluation of EBPs. The goal of any decision aid is to provide assistance and structure to improve the accuracy and consistency of human judgment. This article sets out to: 1) measure the quality of an EBP as a decision input, and 2) determine the outcome of the investment decision. These two measurements enable the decision input and outcome to be compared and, thus, address two primary research objectives: 1) Does the quality of the EBP relate to the outcome of a new venture? and 2)What are the principles that, if embodied in an EBP, will enhance the likelihood that it is successful?

If these questions are answered, entrepreneurs stand to benefit by having a guide to writing EBPs based on researched principles. VC firms will have a regime for rating the quality of these plans and, thus, the potential to improve their investment decisions.

**FROM GRAND SYSTEMS THEORY TO A SIMPLE ATTEMPT TO BE SYSTEMATIC**

Consistency and accuracy of human decision-making can improve with a system. "Systems theory" was introduced by Bertalanffy in 1951. He proposed that problems can be better solved if component parts are viewed as integrating to a whole. A system is a set of related components that work together in a particular environment. The use of systems theory in management is a product of the merger of many ideas from scientific management, human relations management, and operations management (Ackoff [1964]). The input-process-output model is a subset of system theory that originated during the industrial revolution. It has been used to great benefit in many domains, from manufacturing to communications and decision-making to computer programming.

The input-process-output model can be used to flame the deal screening process in VC firms. Enhancing the input of any procedure naturally improves the process and output. VC decision-making should be no different. The decision input and process can be improved by making the writing and rating of EBPs more consistent. This has the potential of improving the decision output of deal screening. In other words, standardizing the content of EBPs and the assessment regime has the potential to improve the results of VC investment decisions. This article makes no pretense of being elaborately grounded in formal systems theory. But our methodology--or our attempt to be systematic in a quest for an improved VC deal-screening process--is compatible with the fundamental tenets of systems theory. In this study, we investigate the relationship between a systematic approach to entrepreneurial business planning (the decision input) and the resulting venture outcome.

This article is the third phase of a three-phase research project (see Exhibit 1) focused on enhancing the business plan screening process through standardization. Phase 1 one of this project (Mainprize et al. [2002], presented at the BKERC) explored the effectiveness of business plan evaluation (process) using viable venture attributes to predict new venture success (output). The results of Phase 1 indicated significantly higher "hit-rates" (% of correct decisions) by using a standardized decision process. The results of Phase 2 (Mainprize and Hindle [2003], presented at the BKERC) indicate that the presence of four Entrepreneurial Business Planning principles positively comports with the investment decision. In this article (Phase 3), we examined the primary decision input, the Entrepreneurial Business Plan as it affects the outcome of a new venture.

EXHIBIT 1

Three-Phase Model for Studying the Relationships between Writing and Rating of the Entrepreneurial Business Plan and the Investment Decision
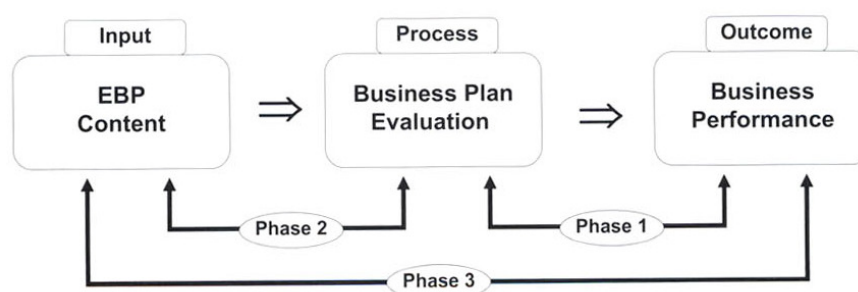
From a methodology perspective, fundamental questions about the input and outcome of VC decisions need to be addressed. Three questions arise concerning the decision input: 1) What is the theoretical basis for writing EBPs? 2) What are the principles important to the quality of EBPs as an input in the investment decision? and 3) How can these principles be measured and operationalized?

Two questions arise concerning the investment decision outcome (venture performance). 1) What are the most common measures, methods, and sources used in current empirical research to measure performance of new ventures? and 2) What are the most appropriate means to measure specific new venture performance when the independent variables are generic principles for writing and rating EBPs?

Writing Principles for Entrepreneurial Business Plans

Planning generally produces better results than does trial-and-error learning (Ansoff [1991]). A proliferation of academic and practitioner literature stresses the importance of planning, promoting models of the planning process, and offering normative advice on how to effectively design and implement strategic and operational plans. Fundamentally, the objective of planning in business is to minimize uncertainty of future events in the pursuit of a goal. What is the theoretical basis for writing business plans?

Mainprize and Hindle [2003] performed a distillation of 22 pieces of literature related to business planning, with varying levels of theoretical rigor, to suggest that an EBP

has two fundamental purposes: 1) Communication: An EBP must be a tool that clearly communicates the future and its uncertainty; and 2) Credibility: EBPs must portray credibility by providing for revision and iteration.

According to Hindle [1997], an EBP embodies a learning ethic by effectively using the power of simulation to represent the new venture's most likely feasible future. Simulation "commences a dialogue with investors whose perspectives, responses and queries can then be used to forecast multiple alternative scenarios" (Hindle [1997: 115]). From the credibility perspective, an effective EBP has the capacity to enable the target investor to "gain flexible perspectives on the desirability and feasibility of the new venture" (Hindle [1997:115]).What are the specific principles that are important to the quality of an EBP?

Mainprize and Hindle [2003] further distilled the literature into a total of 10 fundamental principles to evaluate the quality of EBPs, largely, by adapting the 12 laws and the six success rules from Hindle's Enhanced Entrepreneurial Business Planning Paradigm [1997].

They found that five principles relate to the first fundamental purpose, i.e., communication of an uncertain future, of an EBP (see Appendix A). Communication includes the principles of: 1) expectations, 2) milestones, 3) opportunity, 4) context, and 5) business model. The second fundamental purpose of an EBP, credibility by providing for revision and iteration, includes the principles of: 1) team, 2) elaboration, 3) scenario integration, 4) financial link, and 5) the deal. How can these principles be operationalized?

The 10 principles synthesized from the literature are operationalized by converting them into an assessment tool. Mainprize and Hindle [2003] developed a survey tool called the Entrepreneurial Business Plan Assessment Regime (EBPAR). The goal of EBPAR is to create a systematic means to assess the extent to which a given EBP complies with principles from the literature that are known to be important to the quality of EBPs.

The tool is designed for the user to, literally, check boxes indicating the presence of elements important to each principle. The user then simply circles a high-medium-low rating, based on the number of boxes checked for a respective principle. The survey tool is found in Appendix A. EBPAR is designed for simplicity, and simplicity is utility's greatest friend.

New Venture Performance to Capture the Investment Decision Outcome

One of the central issues in entrepreneurship is performance. This issue achieves its more dramatic manifestation through the question: why do some new firms succeed and others fail? If researchers in the field of entrepreneurship can determine what factors influence new firm performance, prospective entrepreneurs and investors will benefit. If certain factors increase the probability of success (or lessen the probability of failure), entrepreneurs can self-assess their ventures and modify their EBPs accordingly. Investors will be more focused on the selection and application of relevant, rather than irrelevant, deal screening criteria. Researchers attempting to

investigate and discover these factors face the challenges of defining and determining new venture performance.

EBPs are dynamic by nature and commence "a dialogue with investors whose perspectives, responses, and queries can then be used to forecast multiple alternative scenarios." (Hindle [1997: 115]). Sales growth provides both an objective financial measure as well as the ability to capture the dynamic nature of new venture performance. There are four specific reasons why sales growth is the best measure of new venture performance.

First, growth in sales (measured as a percentage) has been widely used in past research (Biggadike [1976]; Feeser and Willard [1990]; and Zahra and George [1999]). Commonality is not an argument for efficacy, but rather for comparability. Sales growth can be considered "common currency" among new venture research in much the same way that profitability (ROI) has become the common currency among established firm research (McDougall, Robinson et al. [1992: 276]).

Second, sales growth is the barometer by which practitioners gauge their degree of success (Baumol [1967]; Feeser and Willard [1990]).The now classic works of Baumol [1967], and Penrose [1959] explicated the emergence of growth as the economic goal of emerging firms (Robinson [1999]).

Third, sales growth is a more objective measure than profitability. Feeser and Willard [1990] found that reported sales revenues should be a relatively "clean" number. Although opportunities exist for entrepreneurs to distort reported sales in a particular period, calculating growth using multiple reporting periods corrects any potential distortion.

Fourth, sales growth accurately captures the firm's major growth stage. After equity investors fund a new venture, they carefully monitor the growth stage. The growth stage is critical because the fate of a new venture is often determined during this period of time. (Bell [1991]; Moore [1991]; Doyle [1999], and Cooper [2001]) A significant rise in sales in the growth stage is often indicative of overall new venture success (Hambrick and Crozier [1985]; Feeser and Willard [1990]; Bell [1991]; Moore [1991]; McGee, Dowling et al. [1995]; Doyle [1999], and Cooper [2001]).

We determined that sales growth is the most logical specific measure to determine the outcome of a new venture subsequent to the investment screening decision.

Research Objective

From the execution perspective, higher quality EBPs could enable entrepreneurs to make better decisions and implement strategies more effectively during the startup process. The benefit of a well-written plan is to an entrepreneur what a midwife is to an expectant mother. Without a business plan, "new ventures are likely to be stillborn through a lack of ability to attract vital physical and financial resources" (Hindle [1997: 7]). A midwife plans for multiple scenarios during the birth process. An EBP provides the entrepreneur with clear and dynamic strategies to deal with the inherent uncertainty as the new venture is born.

No apparent research to date empirically tests EBP writing principles. In Mainprize and Hindle [2003], 10 EBP principles were discovered and synthesized from the literature (see Appendix A). In this article, the 10 principles are empirically tested in order to answer the question: Is positive comportment with EBP writing principles related to positive new venture performance?

POPULATION, SAMPLING AND DATA COLLECTION

Our unit of analysis, the investment screening decision, stems from decisions made about EBPs. Our sample of business plans was taken from the population of U.S. business plans seeking VC funding. For this study's sampling frame, we utilized data gathered from over five years of academic-practitioner collaborative efforts with a major North American VC conference provider. We examined 129 entrepreneurial ventures seeking VC funding. Each venture team submitted a business plan conforming to specific content guidelines upon submission. Over the 3.3-year period, from 1999 to 2002, companies submitted business plans for acceptance into seven conferences (two-three annually) held in three major U.S. cities. The business plans represent ventures from the technology (hardware, software, and Internet), biotechnology, manufacturing, retail, and service industries from 21 states across the U.S.

MEASURES

The quality principles of an EBP became the independent variables studied to predict the dependent variable, the new venture's performance.

Independent Variables: EBP Quality Principles

The quality of each EBP as a decision input was assessed using the writing principles of the Entrepreneurial Business Plan Assessment Regime (EBPAR), formally articulated in Appendix A. The data set for independent variables included an assessment using the one-to-nine ordinal scale of all 10 writing principles, for each of the 129 EBPs.

Dependent Variable: Actual Venture Performance

Telephone interviews were conducted to determine the performance of all 129 new ventures in the sample. Semi-structured telephone interviews were conducted with the lead entrepreneur identified in the original EBP.

The ultimate venture performance was determined by using a threshold of sales growth. An average growth in sales was calculated using two data points: 1) previous year's sales figures, and 2) the estimate for the current year. A threshold of sales growth was used to classify successful and unsuccessful ventures. Therefore, if the surviving ventures met a sales growth threshold of [greater than or equal to] 50% per year, they were seen to have achieved successful performance (receiving the code "1"). A sales growth rate of <50% was deemed be to unsuccessful (receiving the code "0"). Consequently, the final data set for dependent variables included venture performance status code of "1" or "0" for each of the 129 EBPs.

Validity and Reliability Issues

The real-world, real-time decision data generated in this study proved valuable for testing our hypothesis, but also raised four concerns that we addressed. First, the potential for personal bias by the trained evaluation team was reduced in two ways: 1) at the time of assessment, the evaluator (judge) had not met the entrepreneurial team or engaged in any significant correspondence with the entrepreneurial team, 2) the judge utilized the 10 cues of the EBPAR based solely upon information provided in the WBI format business plan submitted by each company via mail or email. Second, although there was a potential threat that the information in the business plans was inaccurate and carried over into the analysis, Roure and Keeley [1990] found that VCs rarely need to make "intense" correction in the information. Thus, we considered it reasonable to assume that the business plans were accurate enough for this study. Third, a minimum of 35 scenarios is typically deemed sufficient to accurately capture a decision policy (Stewart [1988, 1991]). With 129 business plans (scenarios), we substantially exceeded the minimum requirement. Fourth, with a trained team of evaluators rating 129 business plans from the quality (using the EBPAR) perspective, the inter-rater reliability of the assessment tool becomes important. Five BCom students using the EBPAR evaluated 25 business plans in a pilot study. Their inter-rater reliability was 78%.

MULTIVARIATE ANALYSIS TECHNIQUE: LOGISTIC REGRESSION

After the overall quality level and the actual venture performance were determined, multivariate analysis technique was employed. Multivariate analysis was performed using Logistic Regression (Pampel [2000]). SPSS software (version 10.1) was used to operationalize all analysis techniques.

Rationale for Choosing Logistic Regression

Bivariate analysis is an effective means of testing if the difference between two variables is significant. More sophisticated analysis techniques must be employed to determine the proportionate effect that each independent variable has on predicting the dependent variable. Specific to this study is the size effect of each EBP writing principle on the actual performance of a new venture. To compare the effect of each rating principle on the binary venture performance outcome (successful and unsuccessful), logistic regression was used.

A binary qualitative dependent variable with values of 0 and 1 seems suitable on the surface for use with linear regression or discriminant function analysis. Logistic regression, however, is one of the principal analytical tools for relationships that a) do not meet the assumptions of linear regression, b) are best modelled via the logistic (S-shaped) function, and c) involve a dichotomous outcome variable.

RESULTS

Goodness of Fit of the Model

Three statistics are appropriate to determine the goodness of fit of the logistic regression model. First is the log likelihood. The "Initial Log Likelihood Function"

has a value of 166.8548. This statistic indicates how well the model fits the data, given the parameter estimates, which at the initial stage of parameter estimation includes only the constant in the model. Subsequently, the predictor variables are entered into the model and a sufficient number of estimation cycles (called "iterations") are completed. In this case, the SPSS results (see Exhibit 2) reveal that five iterations were required to obtain stable estimates of the parameters.

E X H I B I T 2
Goodness of Fit Results of the Logistic Regression Model

Initial Log Likelihood Function	166.8548		
-2 Log Likelihood	99.322		
Goodness of Fit	137.544		

	Chi-Square	df	Significance
Model Chi-Square	67.532	10	0.0000
Improvement	67.532	10	0.0000

Pseudo R^2	
Nagelkerke - R^2	0.562

Note: Estimation terminated at iteration number 5 because Log Likelihood decreased by less than 0.01%.

For this analysis, stability was defined by default in the SPSS program as a decrease in the log likelihood of less than -0.01%. The five iterations produced a -2 log-likelihood statistic of 99.322. This statistic measures how poorly the model predicts the decisions--the smaller the statistic, the better the model. A decrease in the -2 log-likelihood statistic, after adding the predictor variables to the model, indicates that the use of the 10 EBP writing principles as independent variables improved the prediction of successful and unsuccessful venture performance.

The second fit statistic, the improvement statistic, is similar to the F-change test in multiple linear regression. This tests whether there is significant change in the overall model after a set of predictors is added to the model with only the constant included. Two statistics are reported for assessing the statistical significance of the improvement in the model. These are provided in the output, labeled "Model Chi-Square" and "Improvement" (see Exhibit 2).

In this analysis, the difference between the model containing only the constant (initial -2 log likelihood = 166.8548) and the model containing all the variables (-2 log

likelihood = 99.322) yields a value of Chi-square equal to 67.532. With degrees of freedom equal to 10, the calculated p-value is 0.0000, indicating that one or more coefficients included in the model are significantly different from zero. In other words, the model will predict a group of new ventures as realizing successful or unsuccessful performance outcomes more accurately than random guessing over 99% of the decisions when the technique is used.

The third fit statistic is the pseudo [R.sup.2] In logistic regression, the relationship between the variables is not linear, but curvilinear. The log odds transformation of the variables affects interpretation of the coefficients. For example, although logistic regression coefficients are nevertheless interpreted as the change in the value of the outcome variable associated with a unit change in the value of the predictor variable, the slope of the curve will vary depending on the values of the independent variables.

The [R.sup.2] represented from linear regression is probably the most popular measure of fit in statistical modeling. The measure provides a simple and clear interpretation, takes values between 0 and 1, and becomes larger as the model "fits better." The curvilinear nature of logistic regression prevents the reporting of [R.sup.2]. There is, however, a pseudo [R.sup.2] statistic reported in logistic regression. The Nagelkerke [R.sup.2] attempts to provide a logistic analogy to [R.sup.2] in OLS regression (Hosmer and Lemeshow [2000]). The Nagelkerke measure reports explained variance from 0 to 1, as does [R.sup.2] in ordinary least squares. The Nagelkerke [R.sup.2] of this model is 0.562.

Classification Accuracy of the Model

How well the model classifies the observed data is a second way to determine how well the model performs. This is accomplished by examining how "likely" the sample results are, given the parameter estimates.

Exhibit 3 provides a contingency table with observed classifications for successful and unsuccessful venture performance, with the predicted classifications based on the selected model. In this case, correct predictions were made for a total of 105 of the 129 EBPs. The model was more accurate at predicting unsuccessful than successful performance outcomes. The model correctly predicted 88% of the sample that realized unsuccessful performance outcomes, and 69% that were successful (see Exhibit 3).

EXHIBIT 3

Results of Predicted vs. Observed Classification using the Logistic Regression Model

Observed Classification	Predicted Classification		Percent Correct
	Well written plan?		
	No	Yes	
Unsuccessful Venture Performance?	74	10	88.10%
Successful	14	31	68.89%
		Overall	81.40%

Note: Number of cases (n) = 129.

Specifically, correct predictions were made for 74 new ventures that, on the basis of the model, were predicted to become unsuccessful, and 31 new ventures that were predicted to be successful. The model, however, resulted in incorrect predictions for a total of 24 new ventures: 10 that were predicted to be successful but were unsuccessful (as determined through the telephone interviews with the entrepreneurs), and 14 that the model predicted would be unsuccessful but achieved successful performance. Overall, the model predicted the outcome of a new venture as successful or unsuccessful with 81.4% accuracy. Because random guessing produces a 50% correct classification, the model is approximately 31% more reliable at predicting the performance.

Parameter Estimates and Significant Variables

The appropriate tests for significance of individual variables in logistic regression are based on the parameter estimates. Exhibit 4 contains the estimated beta coefficients (beta) for all 10 variables. To test if each coefficient is zero, the Wald statistic (the square of the ratio of the coefficient to its standard error) was used. The significance level for the Wald statistics appears in the fifth column of Exhibit 4.

Of the 10 variables in this multivariate test, three are significant at the 0.05 level: 1) opportunity (p = 0.0146), 2) team (p = 0.0054) and 3) scenario integration (p = 0.0216).

E X H I B I T   4
Parameter Estimates for the Logistic Regression Model

| | | | Variables in the Equation | | | | |
Variable	B	S.E.	Wald	df	Sig	R	Exp(B)
Expectation	0.2316	0.2625	0.7790	1	0.3775	0.0000	1.2607
Milestones	0.3588	0.2301	2.4319	1	0.1189	0.0509	1.4316
Opportunity	0.4766	0.1951	5.9644	1	0.0146	0.1541	1.6106
Context	-0.0029	0.1524	0.0004	1	0.9848	0.0000	0.9971
Business Model	0.0133	0.1560	0.0073	1	0.9319	0.0000	1.0134
Team	0.4434	0.1594	7.7342	1	0.0054	0.1854	1.5580
Elaboration	-0.0648	0.1211	0.2863	1	0.5926	0.0000	0.9373
Scenario Link	0.3532	0.1537	5.2811	1	0216	0.1402	1.4236
Financial Link	-0.0477	0.1377	0.1198	1	7293	0.0000	0.9534
The Deal	0.0901	0.1783	2554	1	6133	0.0000	1.0943
Constant	-12.5362	2.8747	19.0172	1	0.0000		

Coefficients: Log Odds and Odds Ratio

The coefficient (B) for each predictor variable is the change in log odds of a new venture's achieving a successful performance outcome related to a one-unit change in the predictor variable. For example, the B coefficient for the opportunity variable, 0.4766, is the change in the log odds of successful venture performance when the opportunity score increases by one point. The positive B coefficient indicates that an increase in the log odds of a new venture's achieving successful performance is associated with an increase in the opportunity score. A negative coefficient would indicate that the log odds of achieving successful performance decrease as a particular EBP writing principle score increases.

Because information related to the odds--as opposed to log odds of an event occurring--is easier to understand and communicate, the results in Exhibit 4 also provide information related to the odds of achieving successful venture performance. The interpretation of Exp(B) is relatively straightforward. An Exp(B) coefficient equal to 1.00 indicates no change in the odds of achieving successful venture performance as associated with changes in the independent variable. Values of Exp(B) greater than 1.00 indicate that the odds of success increase; values of Exp(B) less than 1.00 indicate a decrease in odds is associated with a 1-unit increase in the value of the independent variable. Exp(B) is calculated by taking the exponent of the log odds.

CONCLUSION AND DISCUSSION

An important question in entrepreneurship is why some new ventures succeed while others do not. This article set out to answer this question by testing the effect that the quality of writing in an EBP has on performance of a new venture. Specifically, it answered one overarching empirical question: Is positive comportment with EBP writing principles related to positive new venture performance? Comportment with EBP writing principles predicted successful or unsuccessful venture performance with 81.4% accuracy. Since random guessing produces a 50% correct classification, the logistic regression model developed in this study is approximately 31% more reliable at predicting the future performance of a new venture as successful or unsuccessful.

Need for a Renaissance of the Decision Input: The EBP

EBPs are written by many, but mastered by few. Equally, the frameworks to help guide the creation of EBPs are espoused by many and researched by few. We have attempted to empirically study the principles important for the assessment of EBPs that can be used as guidelines for their improvement. The intended goal is to enable an improvement of the fundamentals that are identified as weak by the EBPAR. More generally, entrepreneurs and academe benefit from EBPAR during the writing process by illustrating principles to improve the quality and consistency of an EBP. VC firms have a regime for rating the quality of EBPs and, thus, potentially improving their investment decisions.

The EBP as Midwife

Both the new venture and the new baby suddenly enter a world inherent with risk. A new venture must manage the threat of competitors while attempting to generate sales to survive. Equally, the new baby must fight viruses in the environment while searching for food to survive. Fortunately, the new venture and the new baby are under close care by the entrepreneur and the mother, respectively, during a time when they are most vulnerable. A prudent entrepreneur and a responsible mother both plan in advance to effectively reduce the risks facing their "newborns". The benefit of a well-written EBP is to an entrepreneur what a midwife is to an expecting mother. Without a business plan, "new ventures are likely to be stillborn through a lack of ability to attract vital physical and financial resources" (Hindle [1997: 7]). A midwife plans for multiple scenarios during the birth process. The empirical results of this article clearly show that a well-written EBP provides the entrepreneur with dynamic strategies to deal with the inherent uncertainty as the new venture is born.

These results confirm research by Crawford-Lucas [1992] and Orser et al. [2000] that new ventures utilizing business plans are typically more successful at managing the inherent risks of start-ups, than new ventures that launch without a plan. Crawford-Lucas [1992: 56] argued that while a good business plan will not guarantee success, it can, however, go a long way toward reducing the odds of failure. Orser et al. [2000: 44] concluded that the presence of a business plan contributes to planned growth and is highly correlated with the performance of a new venture. This article extends beyond the link between general planning and performance to examine the effect of specific EBP writing principles on new venture performance.

More specifically, this article concludes that three EBP writing principles are significant: 1) opportunity, 2) entrepreneurial team, and 3) scenario integration. An EBP that comports with these three writing principles significantly improves the likelihood of the new venture's achieving successful performance.

Most entrepreneurs are apprehensive about writing an EBP, but a well-developed plan provides a great many unlimited operational benefits (Arkebauer [1995]). Operating the company on paper first provides an opportunity for entrepreneurs to identify potential problem areas and work out solutions and scenarios without real world consequences (O'Connor [1998: 21]). Entrepreneurs who take the time to clearly map out several potential scenarios, prior to the birth of their new venture, are more likely to see their "baby" grow quickly and achieve a long and successful life. The findings

of this article are, therefore, strongly at odds with some recent attempts in the literature that superficially seem to down grade the importance of an EBP to the entrepreneurial process. For example, Gumpert and Lange [June 2003] have recently completed a study that, on the surface, appears to contradict the need for an EBP as a principal component of generating the interest of a VC in a proposed venture. Their research was based on a survey of 42 American VC and private equity firms conducted in February 2002. Respondents indicated that they were giving less credence to written business plans in investment decisions than is generally perceived. When asked if they had invested in at least one business within the last three years without the benefit of having reviewed a written business plan, 43% said they had. Only 36% said that a written business plan was a very important part of their investment evaluation process. Moreover, 98% said they could become intrigued with a company referred to them that had not prepared a written business plan.

In Gumpert and Lange [June 2003], the two researchers used a definition of the business plan restricted to a written form of 30 to 40 pages in length. The definition of an entrepreneurial business plan, however, does not prescribe a length, and it is "the formal argument used to secure, from prospective investors, resources for a proposed entrepreneurial process" (Hindle [1997: 22]). Hindle [1997] is explicit that an EBP can be effective in a variety of forms, including written (any length) and verbal.

Other studies support Hindle's all-embracing definition. Mason and Harrison [2000: 3] state that "normally investors will receive investment proposals in one of two ways: 1) the most common route is to receive a written proposal, either "cold" through the mail, or via some kind of intermediary. This may be a full business plan or a summary; 2) the other main source of deal flow is investment fairs and forums at which entrepreneurs make short (typically 10- to 15-minute) presentations to an audience of investors." In fact, Fried and Hisrich [1994] state that if a VC is interested in a company that has not yet completed a business plan, the VC will work with the entrepreneur to further enhance the concept. Together, they will write the business plan. Fried and Hisrich conclude that only after the plan is written, will the VC invest. Properly interpreted, the evidence of the Gumpert and Lange study (typical of the "burn your business plan" genre) is actually telling us that what VCs reject is not business plans per se but bad business plans.

Then there is the issue of format; writing can mean many things. The "writing" (or "videotaping," or "slide-encapsulating" or otherwise systematically recording a replicable version of a considered analysis) of a business plan provides legitimacy, signals professionalism and indicates to the outside world that the person(s) involved are "serious."

In sum, a well-written EBP is to an entrepreneur what a midwife is to an expectant mother. The well-written plan provides the entrepreneur with clear and dynamic strategies to deal with the inherent uncertainty as the new venture is born, and increases the odds of success.

APPENDIX A

Entrepreneurial Business Plan Assessment Regime (EBPAR)

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Entrepreneurial Business Plan Assessment Regime (EBPAR)

Goal	Principle	Assessment Questions	Rating Criteria	
Communication	Expectations	Does this EBP meet my expectations for efficient provision of sufficient information upon which to make the screening decision? As a Venture Capitalist, I am expecting that: ❏ key success factors and risks can be clearly identified and are understood. ❏ the venture has a large projected market with good potential market penetration. ❏ a strategy for commercialization, profitability and market dominance is present. ❏ a strong proprietary and competitive position can be established and protected.	Low	Only 1 or 2 of the expectation items are present in the EBP
			Med	3 of the expectation items are present in the EBP
			High	All 4 of the expectation items are present in the EBP
	Milestones	Are milestones in the EBP clearly communicated primarily as: ❏ quantitative values? ❏ financial targets?	Low	Either there are no milestones or they are without any quantitative values or financial targets.
			Med	Some of the milestones use quantitative values or financial targets.
			High	All milestones use quantitative values or financial targets.
	Opportunity	Does this EBP fully describe the venture opportunity by describing the following: ❏ the new combination of the venture, ❏ the magnitude of the opportunity (market size), ❏ market growth trends, and ❏ the venture's value from the market (% of market share proposed market share value in dollars)?	Low	Only 1 or 2 of the opportunity items are described in the EBP
			Med	3 of the expectation items are described in the EBP
			High	All 4 of the opportunity items are described in the EBP
	Context	Does this EBP demonstrates awareness of the context by describing the: ❏ industry structure, ❏ competition, ❏ predicted changes to the industry over time, and ❏ factors that will inevitably change but cannot be controlled by the team?	Low	Only 1 or 2 of the context items are described in the EBP
			Med	3 of the context items are described in the EBP
			High	All 4 of the context items are described in the EBP
	Business Model	Does this EBP outline the business model by explaining: ❏ who pays (paying customer)? ❏ how much (average transaction value)? ❏ how often (repetition)?	Low	Only 1 of the business model items is explained in the EBP
			Med	2 of the business model items are explained in the EBP
			High	All 3 of the business model items are explained in the EBP

Goal	Principle	Assessment Questions	Rating Criteria	
Credibility	Team	Does this EBP describe the entrepreneurial team addressing: ☐ what do they know? ☐ whom do they know? ☐ how well are they known?	Low	Only 1 aspect of the entrepreneurial team is addressed in the EBP
			Med	2 aspects of the entrepreneurial team are addressed in the EBP
			High	All 3 aspects of the entrepreneurial team are addressed in the EBP
	Elaboration	Does this EBP elaborates the overall strategy into sub-plans by: ☐ linking the milestones to sub-plans? ☐ using a timeline to show how tasks, milestones, and sub-plans interconnect?	Low	Either there are no sub-plans or they are without any linkage to milestones
			Med	Some of the milestones are linked to sub-plans
			High	All milestones are linked to sub-plans and a timeline shows their interconnectedness
	Scenario Integration	Does this EBP employ simulation techniques to obtain a variety of plausible future scenarios by establishing a: ☐ most likely case, ☐ best case, and ☐ worst case	Low	Only one scenario is presented
			Med	2 scenarios are presented
			High	3 scenarios are presented
	Financial Link	Does this EBP link the selected strategies discussed in the body of the plan to the financials by addressing: ☐ how much money does the company need over what period? ☐ what is the level of sales to break-even? ☐ when established, how much profit is the company likely to make? ☐ when does cash flow turn positive? ☐ what are the main assumptions on which the forecasts are based?	Low	1 or 2 aspects of the financial link are addressed in the EBP
			Med	3 aspects of the financial link are addressed in the EBP
			High	4 or 5 aspects of the financial link are addressed in the EBP
	The Deal	Does this EBP articulate a value-added deal structure by describing: ☐ funds required; the amount of cash investment required for growth and the use of the proceeds? ☐ the offer; for equity financing the offer is almost always stated as a % of the equity in the venture? ☐ the return; it is commonly stated as an annual return on investment? ☐ exit strategy; the most likely mechanism in which in which the investor can expect to receive the initial investment back plus the return? ☐ exit horizon; the approximately length of time the investment will be illiquid?	Low	1 or 2 aspects of the deal are addressed in the EBP
			Med	3 aspects of the deal are addressed in the EBP
			High	4 or 5 aspects of the deal are addressed in the EBP

Source: Mainprize and Hindle, 2003.

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