

MANAGEMENT LEVEL EVALUATION IN DISTRIBUTION CHANNELS OF AGRICULTURAL INPUTS

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Problem Statement

With the development of Brazilian agriculture the farm inputs market also increased. The crop protection segment (insecticides, acaricides, fungicides, herbicides, seed treatment and other) has grown significantly and it brought the attention of crop protection multinacionais to the country.

The sum of insecticides, acaricides, fungicides and herbicides revenues in the year of 2013 was approximately 10.5 billion dollars, what corresponds to an increase of 8% of the 2012 revenues. According to Wolfgang (2014) this sales increase was due the impact of the *Helicoverpa armigera* caterpillar especially in the soybeans crop.

In this scenario, the input dealers have an important role in reaching the final consumers (farmers). Besides selling the inputs, Marino and Neves (2008) states that this companies also are the suppliers of complementary services and participate in the development process of new technologies, market knowledge and especially in credit offer.

In the last years the distribution channels of farm inputs in Brazil has been through great changes that increased the demand for qualification and professionalism. Some challenges presented by Consoli, Prado and Marino (2011) must be overcome to allow a deeper development: internal business issues, political issues, infrastructure issues, employees and management qualification and others.

The diagnosis of management practices in farm input distribution channels allows us to identify the main improvement points and those points for Marino e Mizumoto (2012) will receive all the time efforts and investments of managers.

Objectives

This brings a question to be answered: is the evaluation of existing management practices in input dealers the path to evaluate the distribution channel management level? Therefore, the main objective of the paper was to apply an evaluation of the management level in five farm input dealers.

Theoretical Background

Importância e funções dos canais de distribuição

A distribution channel or marketing channel transfers the manufacturers' goods to consumers and may provide services ranging from training and facilities to technical

assistance. Channels also fulfill the time, local and ownership gaps that separate the products and services from those that need or want them (KOTLER, 2000).

On the offer side the distribution channels functions are reduction of search costs and market uncertainties, and the adjustment of assortment inequalities. On the demand perspective, the main functions that distribution channels are in charge are creation of routine transaction, reduction of the amount of contacts and support on information exchange (PELTON; STRUTTON; LUMPKIN, 1997).

Neves, Castro and Bombig (2001), present in a summarized way (Figure 1) the input dealers starting by the agricultural and livestock production all the way through the agribusiness processing companies. Besides visually characterizing the operation in distribution channels, the authors show the relationship between the input industry and it's dealers until reaching the farmer based on the most common used arrangement in distribution channels.

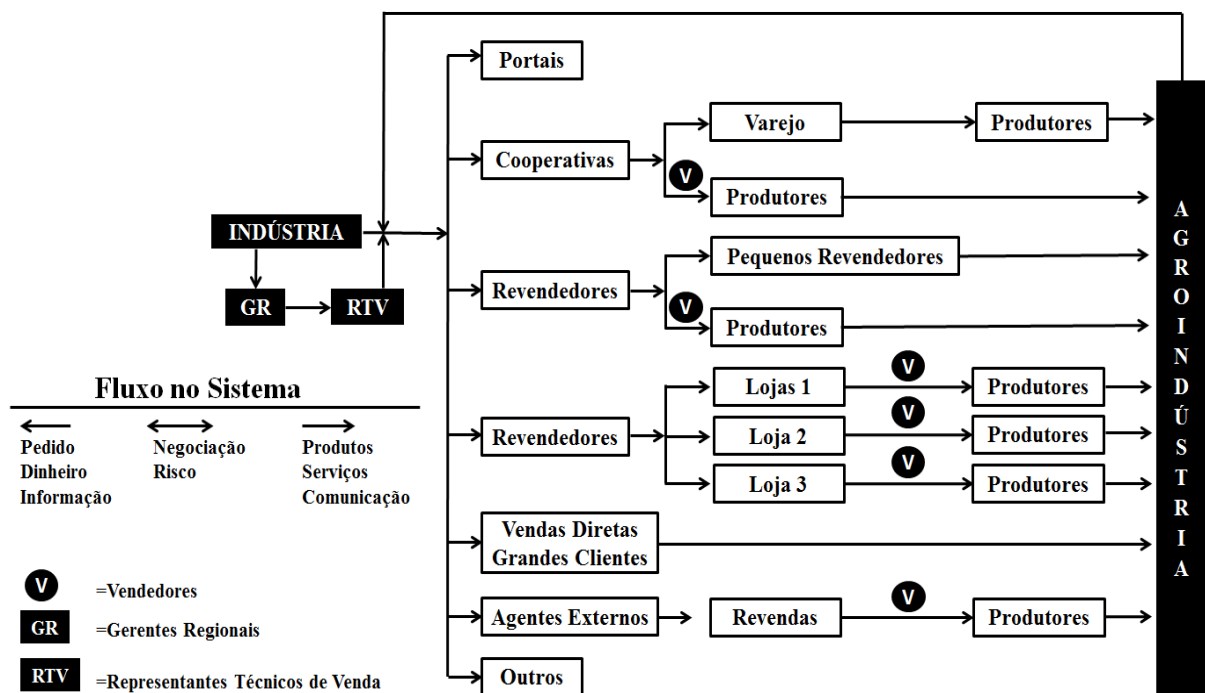


Figure 1 – Distribution channels of inputs
Source: Neves, Castro and Bombig (2001).

Most of the time these distribution channels are cooperatives; resellers that serve smaller dealers and rural producers; dealers with several retail stores; direct sales that reaches big customers; external agents; e-commerce; and other channels considered not usual. It is common that regional sales managers supported by technical sales representatives compose

the organizational structure. In transactions that the “V” letter is present in the figure, these sales representatives may be used (NEVES, CASTRO e BOMBIG, 2001).

Management Practices in Organizations

To be able to respond environmental changes a critical component of the organization is the management system which determines the way that management sees and does the diagnosis of challenges and its impacts, decides and implement decisions. This

Para a capacidade responder às mudanças ambientais, um componente essencial de uma organização é o sistema de gestão, no qual determina a maneira que a administração visualiza e realiza o diagnóstico dos desafios e seus impactos, tomam e colocam em prática as decisões. Because of that, the management technology that a company adopts becomes a competitive differential and a successful tool on strategic implementation (ANSOFF; MCDONNELL, 1993).

Economists have speculated for a long time about the reasons for yield variations on productivity and performance between organizations in the same sector or similar companies in different countries. Despite the identification of several factors that had influence on performance (capital, technology, competences, among others), Bloom and Van Reenen (2007) coment that a part of this differences is due to management quality of the organization (VOGEL and WOOD JUNIOR, 2012).

Chrisman, Bauerschmidt and Hofer (1998) analyzed 62 papers about factors having influence the performance of new endeavours and developed a theoretical model in which the performance depends on the variables: (i) the entrepreneur (with personality, characteristics, values, beliefs, skills, experiences, education, behavior and decisions); (ii) the industry structure (structural characteristics, rivalry and kind of buyers and sellers); (iii) business strategy (planning and development of strategy, goals and objectives, strategic guidelines, competitive armory, segmentation, scope, investment strategy and political strategy); (iv) resources (tangible and non-tangible assets); and finally (v) organization structure (systems and processes directly related to management practices of organizations showing the influence of these on the performance).

Bloom and Van Reenen (2007) defined practice as being a piece of organizational structure and behavior that slowly evolves during time even though there are changes in main managers. Mauro (2009), in his study about management practices in sugar and ethanol sector at São Paulo state, considered management practices as being the competences of an

organization forming resources that can generate competitive advantage to companies that better succeed in implementation and usage of these.

In studies addressing the general characteristics of small companies, it is common that the owners hold the decision power for themselves and do empowers their employees (CARVALHO; BOTELHO; CAMPANHOL, 2003, TORRÉS; JULIEN, 2005, CARPES; TRICHES; PILATTI, 2012). By contrast, researches that analyzed the characteristics of small companies with fast rate of growth, state that this happen because the organization structure allows the leader to empowers operational functions and responsibilities for the staff in order to focus on strategic functions (SMALLBONE; LEIG; NORTH, 1995, FULLER-LOVE, 2006).

The competitive performance of a country or economic sector depends on three sets of factor: internal to the company, that are under direct influence of managers (strategy and management, productive and technological capacity, human resources); structural, has partial influence of company, depending on which industry the company operates (consumer markets, industry configuration, competitors model); systemic that are external to the company environment but can affect it directly (macroeconomic issues, political and institutional, regulatory, social, regional and international infrastructure). Thus, the success and competitiveness of enterprises depends to some extent of management practices (COUTINHO e FERAZ, 2002; WOOD JUNIOR e CALDAS, 2007).

Until recently, the scientific literature lacked empirical studies about management practices because there was not a consistent way to make comparisons between countries or organizations. The research of Bloom and Van Reenen (2007) involved a semi-structured questionnaire with eighteen different management practices that were grouped as themes like operations management, financial management, performance goals, human resources, marketing, technological innovation and sustainability. This research about management practices in medium sized firms was able to explain why not all companies adopts good management practices even though it can improve yields.

One of the motives quoted is related to cost-benefit analysis considering that for improvements in management, investments are necessary and these can overcome the expected benefits. Another reason refers to the attractiveness of practices for managers because it can involve bigger efforts to achieve the benefits. Differences among enterprises also makes that variability in the level of adoption of good management practices being

influenced by the different costs and benefits that each company have according with its characteristics and the macro-environment (BLOOM e VAN REENEN, 2007).

Even though the major body in literature refers to medium and big sized companies analysis, there are some applied researches that present management practices of small companies like Xheneti and Blackburn (2010) that quote strategic planning, human resources management, finance, quality management and performance measures. Other studies are also aimed for family-own business like Chrisman et al. (2010) and Debicki et al. (2009) presenting as common themes: management's professionalization, agency problems, familiar conflicts, succession process and governance.

PRACTICE ID	MANAGEMENT PRACTICES	PRACTICE AREA	REFERENCES
P1	Organizational performance monitoring	Monitoring	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P2	Meetings about oerformance	Monitoring	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P3	Breadth of organizational goals	Organizational goals	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P4	Conexion between goals	Organizational goals	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P5	Time horizon of goals	Organizational goals	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P6	Promoting good performers	Human resources	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P7	Attracting human capital	Human resources	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P8	Retaining human capital	Human resources	Bloom and Van Reenen (2007); Brito and Wood Junior (2009)
P9	Performance monitoring	Human resources	Bloom and Van Reenen (2007)
P10	Organizational structure	Human resources	Market experts and authors
P11	Reward policies	Human resources	Market experts and authors
P12	Customer orientation	Customer orientation	Brito and Wood Junior (2009)
P13	Relationship with stakeholders	Stakeholders	Brito and Wood Junior (2009); Vogel and Wood Junior (2012); Vogel (2012)
P14	Strategic planning	Strategy	Brito and Wood Junior (2009); Vogel and Wood Junior (2012); Vogel (2012)
P15	Market intelligence	Strategy	Market experts and authors
P16	Commercial management	Commercial	Market experts and authors
P17	Commercial goals	Commercial	Market experts and authors
P18	Segmentation of customers	CRM	Market experts and authors
P19	Financial management	Finance	Brito and Wood Junior (2009); Vogel and Wood Junior (2012); Vogel (2012)
P20	Use of financial tools	Finance	Market experts and authors
P21	Credit policy	Finance	Market experts and authors
P22	Analysis and risk management	Risk	Market experts and authors
P23	Inventory management	Inventory and Logistics	Market experts and authors
P24	Logistics operations	Inventory and Logistics	Market experts and authors

Chart 1 – Management practices of classification scheme.

Source: Elaborated by the authors.

In table 1 we list the management practices identified in literature that were used for building a classification scheme of management practice level in input dealers.

According to Bloom and Van Reenen (2007) higher levels of competition are strongly associated with better management practices. The authors also state that family-owned companies with professional management have lightly positive association with good management practices.

The study of Blomm and Van Reenen (2007) influenced researches in other countries and in Brazil resulting in a comparative database about management practices in medium-sized businesses. At the Brazilian study, it was identified that these medium size enterprises compared with others in developed countries, presented a great gap in terms of the implementation of management practices in several areas, especially in human resources area (VOGEL and WOOD JUNIOR, 2012).

In these researched companies data about operational performance were collected and through multivariate statistical analysis on financial indicator scores, a positive relationship between the level of development in management practices and the financial performance of the organization (BRITO e WOOD JUNIOR, 2009). So the companies that obtained higher valuation scores in management practices were also the ones that had more yields, better performance, the ones who grew more and those with lowest mortality rates. The same stated by Bloom e Van Reenen, (2007, 2010).

Vogel (2012) said that for the success of small business, management practices related to knowledge of the market in which the company operates; business planning, good controls and indicators to monitor the company's operations or external factors that may affect it are crucial. The same author points out the cash flow control as one of the most important practices for business management found in the study by the fact that many companies fail due to lack of financial planning and control, since most of small business owners have an aversion to finances.

Management practices in studied small companies are likely to vary according with the profile and professional background of their owners. In organizations in which the owner is a professional manager there is greater focus in finance management, human resources and operations. On the other hand, when the proprietary has a technical background, product innovation process is mostly present than financial management. The sustainability management is another theme that suffer the direct influence of owners profile, reflecting their personal values (VOGEL, 2012).

Procedures

The procedures of this paper can be divided in three different phases to achieve the proposed objectives.

In the first one, a literature review was developed in order to identify the existing management practices in distribution channels. Next, we interviewed three market experts and presented the practices to build the management level classification scheme. They also collaborated creating new practices and validating those identified in the literature.

In the third phase we used as research strategy a multi-case study approach. Analyzing five cases in the farm input distribution industry.

According to Yin (2010) the multi-case studies are a variant of a single case study and they have the same methodological structure. Herriot and Firestone (1983) believe that the multi-case is more robust than using a single case.

The cases analyzed were selected intentionally from the agribusiness industry because of the facility access for researchers in the sector, and also the convenience choice was made because the authors had free access to the companies and went to their office twice a month during a three-month period which facilitated the understanding, contact, data and information collection.

During the several visits to case companies, we interviewed managers and observed the management process and routines in order to evaluate the maturity level of the twenty-four practices identified in each of the five studied dealers. Giving scores of 1 or 3 or 5 (being 1 the lowest level of maturity and 5 being the highest level)

The management level evaluation method was detailed in Simprini (2014).

Results

The main characteristics of the five chosen dealers of agriculture defensives are presented in table 1:

Table 1 – Features of the selected cases

Company ID	Brazilian Region	State	Attending Crops
Company 1	Midwest	Mato Grosso do Sul	Soybean, Corn, Cotton
Company 2	Midwest	Mato Grosso	Soybean, Corn, Cotton
Company 3	Midwest	Mato Grosso	Soybean, Corn, Cotton

Company 4	Southeast	Minas Gerais	Soybean, Corn, Coffee, Sorghum, Potato, Bean.
Company 5	South	Paraná	Soybean, Corn, Wheat, Bean

The five levels of management, practice identification, practice name, practice area and the evaluation of each distribution channel are presented in table 2:

In table 2 are presented the management practices of the five dealers evaluated as described earlier and detailed by Simprini (2014). The scores were given according to author's observation on the maturity level of practices implementation in each of the distribution channels.

In order for the dealer to fit in the level 1 of management, the sum of its individual scores on each practice will have to be up to 24 points; for level 2, ranging from 25 to 54 points; for level 3, range of 55-79 points; to level 4, range of 80-109 points, and in level 5, range of 110-120 points.

It is important to notice that a dealer can adopt practices that would fit in different levels of management from the others and without a logical sequence even though there are practices that depend on each other. However, the classification of management level happened due to the sum of individual practices scores. The practices that were listed in each management level will solidify the foundation of the company's management contributing to an increased level of management and success of the company in long term.

Thus, it was verified that the channels of the cases 1, 3 and 5 are in level 2 of management, with a sum of scores of 38, 42 and 48 points respectively. The case of channel 4 was rated at level 3 of management summing 72 points, and the case of channel 2 is in level 4 of management, presenting the sum of 92 points.

Table 2 – Cases evaluation

Management Level	Practice ID	Practice name	Practice Area	Cases Evaluation				
				Case 1	Case 2	Case 3	Case 4	Case 5
Level 1	P10	Organizational Structure	Human Resources	1	5	3	3	3
	P23	Inventory Management	Inventory and Logistics	1	3	1	3	1
	P7	Attracting Human	Human	1	3	1	1	3

		Capital	Resources					
	P8	Retaining Human Capital	Human Resources	3	5	5	5	5
	P3	Goals Extent	Organizational Goals	1	5	1	3	1
Level 2	P12	Customer Orientation	Customer Orientation	3	3	3	5	3
	P16	Commercial Management	Commercial	1	1	1	3	1
	P13	Stakeholder Relationship	Stakeholders	3	5	3	3	1
	P19	Finance Management	Financial	1	5	1	5	3
	P20	Use of Financial Tools	Financial	1	5	1	3	1
	P1	Performance Tracking	Monitoring	1	3	1	1	1
Level 3	P9	Performance Evaluation	Human Resources	1	5	1	1	1
	P11	Bonus Policy	Human Resources	3	5	1	3	3
	P6	Promoting Professionals with Good Performance	Human Resources	3	5	3	3	3
	P24	Logistics Operations	Inventory and Logistics	3	3	5	5	5
	P15	Market Intelligence	Strategy	1	5	1	5	3
Level 4	P14	Strategic Planning	Strategy	1	1	1	1	1
	P17	Commercial Goal	Commercial	1	3	1	3	1
	P18	Customer Segmentation	CRM	1	1	1	1	1
	P4	Connection between goals	Organizational Goals	1	5	1	3	1
	P21	Credit Policy	Financial	1	3	1	3	3
	P2	Performance Meetings	Monitoring	1	5	1	3	1
Level 5	P5	Goals Time Horizon	Organizational Goals	1	3	1	1	1
	P22	Analysis and Risk Management	Risk	3	5	3	5	1
TOTAL				38	92	42	72	48

Analyzing the evaluated management practices in the five cases studied (Table 3), we can notice that cases 1, 3 and 5 were very poorly evaluated in almost all the areas having as an exception a few practices being well evaluated. This can be seen in the practices of “Logistics Operations” and “Retaining Human Capital” (Table 2) in cases number 3 and 5. This finding is aligned with the comments of Simprini (2014) in which the author states that it is possible

to have practices being implemented with a top level of maturity that would fit in higher levels of management than the channel was evaluated considering all the practices.

Table 3 – Evaluation of management practices’ areas

PRACTICE AREAS	AVERAGE SCORE OF PRACTICE AREAS				
	Case 1	Case 2	Case 3	Case 4	Case 5
Monitoring	1,0	4,0	1,0	2,0	1,0
Organizational Goals	1,0	4,3	1,0	2,3	1,0
Human Resources	2,0	4,7	2,3	2,7	3,0
Customer Orientation	3,0	3,0	3,0	5,0	3,0
Stakeholders	3,0	5,0	3,0	3,0	1,0
Strategy	1,0	3,0	1,0	3,0	2,0
Commercial	1,0	3,0	1,0	3,0	1,0
CRM	1,0	1,0	1,0	1,0	1,0
Financial	1,0	4,3	1,0	3,7	2,3
Risk	3,0	5,0	3,0	5,0	1,0
Inventory and Logistics	2,0	3,0	3,0	4,0	3,0

Source: Elaborated by the authors

Researches focusing on general characteristics of small-sized often state that owners in these companies tend to centralize the management as we see in Carvalho Neto, Botelho and Campanhol (2003); Torr s and Julien (2005); Carpes, Triches and Pilatti (2012). As an example of management centralization we present the marketing channel of case 3 which has a centralizing manager focused on financial and commercial areas that did not empower his employees. This can explain the reason why the maturity level is that low in financial and commercial areas’ practices of level 2 on the management classification.

In contrast, studies that analyzed the characteristics of small companies with high rates of growth say that they developed an internal structure able to allow the manager to delegate the operational responsibilities in order to focus on strategic functions (SMALLBONE; LEIG; NORTH, 1995, FULLER-LOVE, 2006). It can be verified with case number 2 that was very well evaluated in Human Resources area, especially in the “Organizational Structure” practice. The distribution channel had a fast growth in the years before the study and possesses a manager that delegated many of his functions in financial area and dedicated himself to strategic issues of the organization.

According to Vogel (2012) most of small entrepreneurs have aversion to finances. In input distribution industry it is common that former dealer's sellers decide to start their own business. The majority of these do not have a solid knowledge about financial area and fail to implement financial management practices, what can be verified in cases number 1, 3 and 5.

In distribution channels of cases 2 and 5, those that had the best evaluation in "Financial" area, we can notice that there were several managers with an administrative/finance background. It is what Vogel (2012) also states about management practices varying according to the profile and background of its owners. Professionals on this industry tend to implement practices related to financial and processes areas.

Conclusions

We verified that input dealer's management practices evaluation is an important tool to measure the existing management level in the distribution channel.

It is important to underline that a distribution channel can adopt practices that would fit in different management levels and it does not have a logical sequence, even though there are practices that depend on each other.

We note that the profile of the managers and/or owners is an important factor to consider when evaluating the management level and that some areas may have a more mature management level simply because of the focus and attention that these managers have towards these areas. The management practices vary according to the profile and professional qualification of their owners. If the owner comes from the financial/administrative area, he or she tends to implement practices related to the financial processes and areas.

Managers should be aware as to the management centralization and the low level of empowerment results in low levels of maturity in channel management.

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