Profitability and Growth Topology Analysis of Unilevel-type of Network Marketing Structures

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This study analyzes a type of multilevel marketing (MLM) structure through a simulation study of MLM systems. In unilevel MLM, distributors earn from both sales from direct selling and commissions from recruitment of downlines. Several distributional assumptions were made in constructing the system, such as the use of the uniform, Bernoulli, and Poisson distributions. Member income is measured based on commission from recruit pay-ins in their downlines and income from direct selling. Based on the simulated unilevel MLM structures, the fundamental behavior of a unilevel MLM is captured and analyzed in terms of its network growth topology and profitability.

Keywords: *multilevel marketing (MLM), network simulation, unilevel structure, complex systems, probability distributions*

1. Introduction

Multilevel marketing (MLM), also known as network marketing, refers to the practice of distributing, selling, or supplying products through independent distributors (Koehn, 2001). Popular products include topical preparations and cosmetics, clothing apparels and vitamin supplements. These products are being promoted through a word-of-mouth technique which generates a high level of confidence among consumers as the distributor is likely their friend or relative. This type of retail distribution and commercialization for products and services where there is direct contact between the buyer and seller is called direct selling (Cruz and Olaya, 2008).

Though not all forms of direct selling are multilevel marketing, compensation plans which does not only give distributors income from selling but also from recruiting downlines are adopted by many networking marketing organizations

(NMO). In network marketing, distributors can also earn by recruiting people, creating a downline of distributors and a pyramid which can be translated to multiple levels of commission-based compensation. In an NMO, there could be multiple levels of people receiving income from one person's sales or recruits (Gonzales, 2008).

As of 2012, according to the World Federation of Direct Selling Associations (WFDSA), there are about 3 million individuals who are involved in direct selling businesses in the country with retail sales amounting to 1 billion US Dollars – the tenth largest sales in the Asia-Pacific region. The Philippines however registered a 31.3% year-on-year growth in sales, the second highest percentage growth worldwide and the sixth highest in terms of sales. Today, there are more than 80 MLM companies in the country.

The Philippines is ideal for network marketing and direct selling. There are basically two sales motivators in joining the NMO. The first one is the strength of social relationship between a buyer and a seller which is strongly correlated with amount of sale (Frenzen and Davis, 1990), thus emphasizing the importance of personal relationships in building a network (Grayson, 1996). This is particularly appealing to the Filipino society since Filipinos seek social approval, acceptance and belongingness (Hallig, 2002). A classic translation from social relation into a commercial context can be described by a *suki* relationship, which is a mutual market exchange relationship and trust development between a seller and a buyer (Dolan, 1991). Assuming that the product is consumable with good quality price, MLM uses the best marketing tools and techniques to establish long term and profitable relationships (Constantin, 2009). Financial needs is also an apparent motivator for individuals to join NMOs as sellers. The National Statistics Office (NSO) reported a July 2013 underemployment rate of 19.2% or 7.341 million, recovering from the July 2012 estimate of 22.8% or 8.565 million, the highest in six years. These underemployed individuals, who according to NSO are "employed persons who express the desire to have additional hours of work in their present job, or to have additional job, or to have a new job with longer working hours" provide an ideal scenario for NMOs since selling and recruitment can be regarded as an additional job, hence additional income. Sreekumar (2007) saw MLM as a potential tool for socioeconomic development. Multilevel marketing systems can influence the society through generating employment, mobilizing long term funds and improving the quality of life of people, indirectly helping the economy as well by providing employment opportunity for the unemployed.

However, MLM schemes are being questioned. Koehn (2001) stated that NMOs are operating in a pyramid scheme which is both fraudulent, since they usually promise a large profit for a small investment, and unethical because they engage in recruitment-centered rather than product-centered business. In pyramiding, individuals pay to join the network, but not to sell products. Muncy (2004) gave five pointers to know the legitimacy of an MLM opportunity: the

compensation plan, legitimacy of products, involvement cost, work required and company record. Vander Nat and Keep (2002) on the other hand provided a mathematical model to discriminate MLM from illegal pyramiding. This model considers key factors such as recruitment-based and retail-based rewards. There were also reports of great income disparity among the distributors of an NMO. Taylor (2011) revealed that commissions paid by the company to distributors were not enough to cover their expenses, so almost all members lose money, with the rare exception of those at the top of a hierarchy of distributors. Similarly in Fitzpatrick (2008), the analysis of actual average income reports of known MLM companies showed the great disparity in rebate payout between the extraordinary high pay for a tiny group and the absence of net profit for a larger group. These top distributors represent, on the average, about 1 in 10,000 distributors.

On the technical side, an analysis of the behavior of an MLM system is a challenge. The growth of a network marketing organization cannot be exactly predicted due to the presence of so many variables on social dynamics, an individual's recruitment skill, geographic constraints, mass media advertising and many more. Nonetheless, some basic behavior of a network system can be modeled by a combination of statistical assumptions and algorithms. The paper by Gastwirth and Bhattacharya (1984) is among one of the earliest to use probability models in analyzing fraud in chain letter and pyramid schemes, concluding that a participant's potential earning is dependent on his time of entry, and further have shown that only a small percentage of distributors will earn money. Decision models (Coughlan and Grayson, 1998) and diffusion processes (Cruz and Olaya, 2008) were used to generate a network marketing topology which can be used to analyze the important characteristics of NMOs. Pedrood et al. (2008) constructed an algorithm to generate the growth topology for binary MLM plans.

This study aims to create a unilevel MLM structure using different statistical distributions. The construction of the growth topology is based on realizations of random variables following probability distributions with different parameter values. These distributions will emulate the fundamental dynamics happening in the network, like the number of recruited downlines and probability of joining the NMO. This study will examine the income opportunities in joining NMOs using the simulated MLM structure. The income of this simulated structure is based on recruitment commissions and direct selling. Both the MLM system and income are generated with varying characteristics. The flow of income in these constructed networks is then studied through comparison of the income generated by members belonging to different levels of the network and among the different MLM structures constructed.

2. The Unilevel Network Marketing Structure

The unilevel network marketing structure is a type of multilevel marketing wherein the direct sellers, or distributors recruit downlines, who in turn become

distributors themselves. Downlines are composed of recruited members and all other subsequent recruits thereafter. Direct downlines, on the other hand, are members personally recruited by the distributor. For example, A recruited B1 and B2, then B1 recruited C while B2 recruited D1, D2 and D3. All seven of them are distributors, with A having all others as her downlines. B1 and B2 are the direct downlines of A. B1's downlines are C but not D1 and D2. A and B2 are uplines of D1 and D2. The number of downlines recruited directly by a distributor is unrestricted. A distributor's network growth stops when all downlines have terminated their recruitment or not one individual joins the network. The whole network growth terminates when all distributors' networks at any level ceases to branch out.

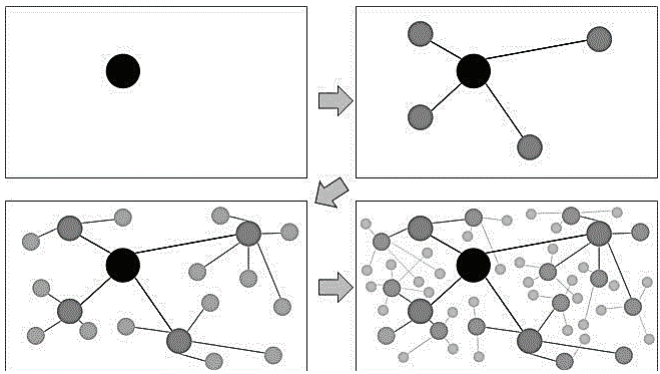


Figure 1. Stages of a Unilevel MLM Structure Growth

This type of MLM structure has the same growth topology with a pyramid scheme. The difference is the compensation plan. Whereas unilevel structure includes income from retail, the pyramid does not and relies only on recruitment-based compensation. The inclusion of profit from selling makes the former a legal marketing strategy. In general, the growth topology of an MLM structure depends on two key factors: the innovation effect which is an inherent attraction of potential members to join the network and the imitation effect which is the diffusion of influence by word-of-mouth.

There are two ways for a distributor to make income, based on (a) profit from retail sold and (b) net commissions from sales of downline distributors. This compensation plan encourages both the selling of product and the growth of the network.

Unilevel types of MLM structures were studied by Legara et al. (2008). They showed that the growth of a unilevel type of MLM structure diminishes when the network levels have reached a certain threshold. Decrease is primarily caused by

the finiteness of the population of possible recruits in members' social group. Real data based on unilevel structures were used in their study. Their results showed that the first 20% of the members in the unilevel system accounted for only 30% of the total income earnings, contrary to a Pareto earning distribution, where 80% of the wealth is controlled by 20% of the members. They also concluded that earning potential is independent of member position in the network. In this kind of system, new members, who are below the system, could earn as much or even greater than the old members, who are above the system, by simply recruiting more downlines.

3. The Simulated Unilevel MLM

3.1 Growth topology

Consider distributor i at level l in the network recruiting potential downline distributors. We have the following specifications:

$$n_{i,l} = \sum_{j=1}^{k_{i,l}} x_{i,j} \tag{1}$$

$$X_{i,j} \sim Bernoulli\ (p_{i,l}) \tag{2}$$

$$P_{i,l} \sim Uniform\ (0, a_{i,l}), \text{ where } a_{i,l} \in [0,1] \tag{3}$$

$$K_{i,l} \sim Poi\ (\lambda_{i,l}) \tag{4}$$

The term (1) represents the number of recruited direct downlines of distributor i belonging to level l where $x_{i,l}$ is a realization of a Bernoulli random variable $X_{i,l}$ with 1 representing those recruited by the distributor i and $k_{i,l}$ being a realization of a Poisson random variable number $K_{i,l}$. The members of these downline distributors will comprise part of the next level, l+1 along with the direct downlines of other distributors in level l. The distributional assumptions (2), (3) and (4) represent the innovation, maturity and imitation effects respectively. The innovation effect or the amount of inherent attraction can be measured as the probability of a potential member to join the network (i.e., to pay-in) while the imitation effect is the word-of-mouth factor for network growth (Coughlan and Grayson, 1998) and is represented here as a Poisson count of individuals invited by the distributor to join. The maturity effect controls the growth of the structure by directly affecting the innovation effect, changing levels of distributor attrition and consequently the imitation effect by preventing the network to explode.

The multilevel marketing system to be constructed is a unilevel structure, where all members can have an unlimited number of downlines or recruits. A distributor recruits potential members to join the network as a realization from a

Poisson distribution. The parameter of the Poisson distribution $\lambda_{i,l}$ indicates the average number of persons recruited by each member. It measures the imitation effect and the recruitment strength of the system. In the simulation study, the Poisson parameter is constant across levels. That is, distributors are assumed to have, on the average, the same number of recruits. In the simulation study, the Poisson parameters with values from 5 to 15 are used.

Table 1. Uniform Distribution Parameters for the MLM Levels

Levels, l	Uniform Distribution Parameters
1	(1, 1)
2 to 5	(0, 0.50)
6 to 10	(0, 0.30)
11 to 20	(0, 0.15)
21 to 30	(0, 0.10)
31 and above	(0, 0.05)

The maturity effect in the simulation is governed by the uniform distribution. The parameter $a_{i,l}$ in (3) gives the maximum probability of joining the network for those recruited by distributor i in level l. The lower the value of the parameter, the lower the range of values the parameter in (2) can take and the higher distributor attrition will be.

The specification above ensures that the simulated MLM network does not explode and stops at a certain point. Aside from reduction in computation time, this is also in line with the findings in Legara et al. (2008) that the unilevel network growth diminishes after it reaches a certain threshold. This is mainly due to the finiteness of the population. As the network reaches maturity, it will become more difficult to recruit distributors and eventually the network will stop growing (Coughlan and Grayson, 1998). Seen also in Brodie (1995), high levels of attrition is not unusual. In Pindyck and Rubinfield (2009), consumer behavior theory describes how consumers allocate incomes among different goods and services to maximize their well-being. Given their preference and budget constraint, consumers choose to buy the combination of goods and services that would maximize their satisfaction. In an MLM situation, when distributors' experiences differ greatly from their expectations, it would lead to sales force attrition (Wotruba and Tyagi, 1991), hence these consumers would not be able to recruit downlines or some of the consumers themselves would refuse to join the network given their constraints. Furthermore, the finiteness of the population of potential members justifies the decrease of the MLM growth.

For each recruit, the innovation effect or the inherent attraction to join the network is defined by a Bernoulli random variable:

$$X_{i,l} = \begin{cases} 1, & jth \ \ recruit \ \ of \ \ distributor \ \ i \ \ joins \ the \ network \\ 0, & OW \end{cases} \quad (5)$$

The parameter value is $p_{i,l}$, which is defined as the probability of pay-in of those recruited by distributor i in level l. In the simulation, it is assumed that the parameter $p_{i,l}$ can take on maximum probabilities seen in Table 1.

Network growth ends when distributor attrition reaches 100%, or all distributors have stopped recruiting or have not successfully recruited new members.

3.2 Distributor income

MLM networks profit from members selling the companies' products and members recruiting new people into the network. In the simulated unilevel MLM, a membership fee of 5000 is paid by recruits who decide to join the system. New members can earn income by recruiting more members, which are known as their direct downlines. These downline distributors can as well recruit their respective downlines, and the recruitment process is repeated. The commission rates for recruitment is shown in Table 2.

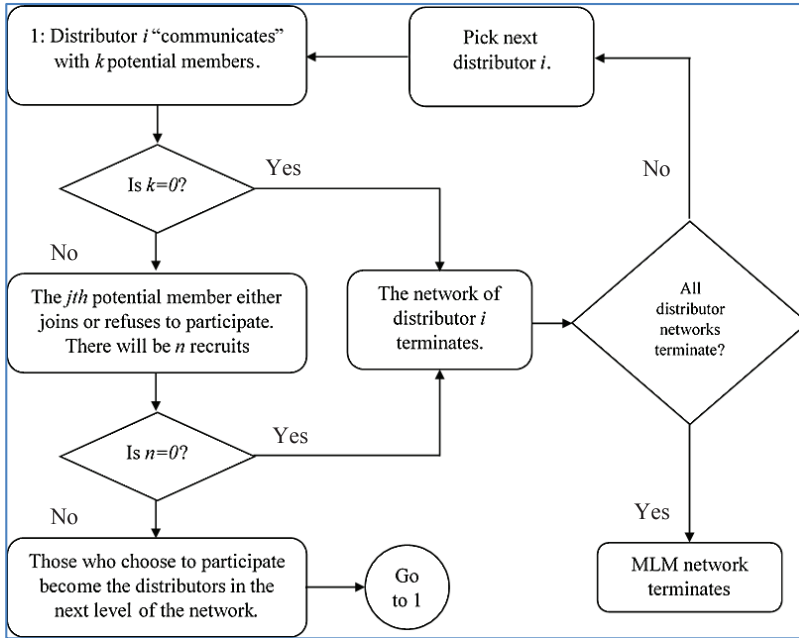


Figure 2. Flow Chart in Generating a Unilevel MLM Structure

The computation of income from recruitment is shown below. Note that the commission rates are based on the downline depth of the distributor: the farther the level of the distributor and her downline, the smaller the commission rate will be. Only five downline levels are considered for the commission computation.

$$Income = (pay\text{-}in) \times (number\ of\ downlines\ in\ level\ i) \times (commission\ rate\ of\ level\ i) \quad (6)$$

Table 2. Commission Rates

Downline	Commission Rate
Level 1	10%
Level 2	8%
Level 3	6%
Level 4	4%
Level 5	2%

To prevent the unilevel scheme to become an illegal pyramiding, income from direct selling is added. A constant of 7500 is then added to all distributors in the network, so that a distributor who has 0 members recruited would still get an income of 2500. This value is equal to the pay-in fee plus a 50% markup price (Coughlan and Grayson, 1998) and thus assumes that all goods are sold out by all distributors. Similarly, the NMO is also assumed to sell their products at 50% mark-up, hence the cost to sell products to distributors is 3333.33.

4. Results and Discussion

This section shows the results of the simulated unilevel MLM networks and an analysis of the results based on the dynamics between the membership and recruitment, membership behavior at different levels in the network, comparison of income across levels and income distribution. Presented below is a summary of simulation results. Note that the increase in number of members and recruits is exponential. Computation time is relatively fast for the *Poi5* to *Poi13* simulations, then making a very noticeable increase in *Poi14* and *Poi15*. It is also interesting to note that without considering direct sales income, a distributor loses by at least 3500, almost consistently throughout all Poisson parameter specifications. All of the highest gainers belong to the top 6 levels. In contrast with the constant distributor net income, the NMO net income increases as the Poisson parameter increases. The NMO per income which is computed as total pay-in value of members subtracted by the cost of the product and total commission made by members (Table 3).

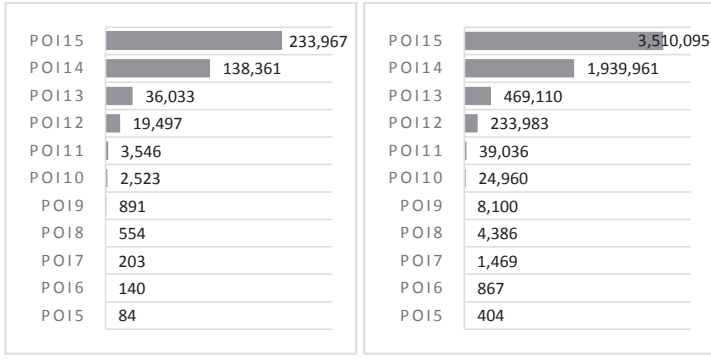
Table 3. Summary of Simulation Results

	Number of members	Number of Recruits (Rec)	Maximum Network Level	Sim Time (Mins)	Mean Distribution NetInc (DS+Rec)	Mean Distribution NetInc (Rec only)	Maximum Distribution NetInc	Level of Distribution with Max NetInc*	Total Pay in (1000s)	NMO NteInc (1000s)
Poi5	84	404	11	<1	3,823	-3,677	8,800	2	420	29
Poi6	140	867	12	<1	3,911	-3,589	9,300	2	700	36
Poi7	203	1,469	18	<1	3,939	-3,561	8,300	6	1,015	46
Poi8	554	4,386	17	<1	3,970	-3,530	4,000	3	2,770	109
Poi9	891	8,100	23	<1	3,977	-3,523	22,100	3	4,455	169
Poi10	2,523	24,960	25	<1	3,989	-3,511	36,100	3	12,615	449
Poi11	3,546	39,036	24	2	3,996	-3,504	31,800	2	17,730	605
Poi12	19,497	233,983	31	4	3,998	-3,502	58,300	5	97,485	3,282
Poi13	36,033	469,110	33	8	3,999	-3,501	64,900	2	180,165	6, 043
Poi14	138,361	1,939,961	36	39	4,000	-3,500	97,600	2	691,805	23,111
Poi15	233,967	3,510,095	41	55	4,000	-3,500	130,700	2	1,169,835	39,028

** If Node 1 gets the maximum income, the presented in the table is the next highest gainer.*

4.1 Membership and recruitment

We observe in Figure 3 an exponential increase in both membership and recruitment as the Poisson parameter is increased. Members are individuals who paid-in while recruits comprise the total number of individuals invited by a distributors to join, regardless of joining or attrition. It is also interesting to note huge jumps in relative magnitude after networks generated by odd-numbered parameters.



(i) Membership *(ii) Recruitment*

Figure 3. Total number of (i) Members and (ii) Recruits by Poisson Parameter

Figure 4 below is somewhat expected due to the uniform parameter specifications at which deeper networks have smaller maximum possible probability of joining the network, hence more recruit attrition.

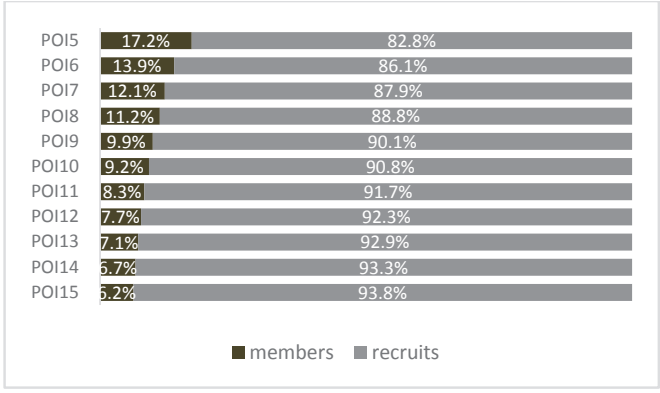


Figure 4. Proportion of Membership vs. Recruitment by Poisson Parameter

Now we observe membership behavior across network levels per recruitment strength. They are grouped accordingly by similarity in their behavior: *(i) Poi5, Poi6, (ii) Poi7, Poi8, Poi9, (iii) Poi10, Poi11 (iv) Poi12, Poi13 and (v) Poi14, Poi15*. The vertical guide lines in Figure 5 below represent the change in uniform parameter specification starting at level 5. The average number of recruits per distributor in *(i)* is low such that they only take 5 to 6 levels to peak and then decline. Note that these Poisson parameter specifications made the earliest termination of network growth and membership. In *(ii)*, observe that all *Poi(7)*, *Poi(8)* and *Poi(9)* stopped their increase in network growth at level 10. Also notice in levels 6 to 10, where the maximum probability of joining is 0.3 that the network growth have certain "breaktimes," indicating that the word-of-mouth Poisson parameter at times can't be able to cope with distributor attrition. Network decline is observed starting level 11. Similar with *(ii)*, we see the peak in recruitment at level 10 in *(iii)*, but more exponential in growth and then slower in decline by

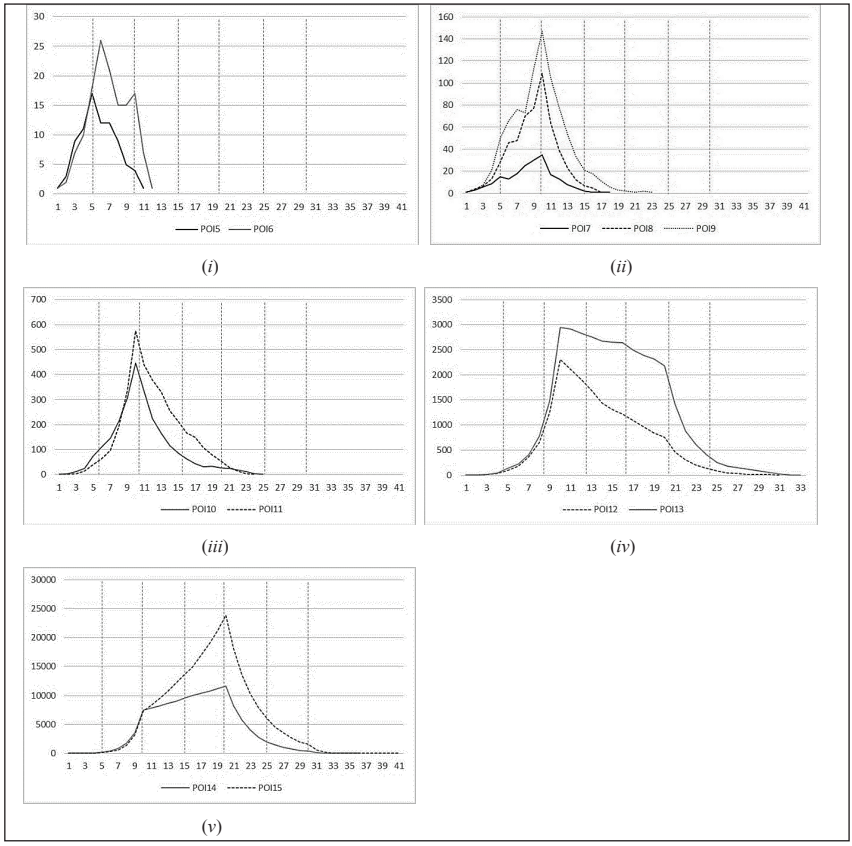


Figure 5. Membership Behavior across Network Levels per Recruitment Strength

level 11. In graph *(iv) Poi(12)*, we see that the decrease in recruitment is rather linear for levels 11 to 20, after which deceleration is faster starting at level 21 where the maximum probability of pay-in is just 0.10. This is also the case in *Poi(13)* where there is linear recruitment decline in levels 11 to 20, but this time significantly much slower. Finally in *(v)*, there has been a shift in the number of members joining the network which now observed until level 20. This time, the strength of recruitment has overcome the increasing rate of attrition. (Figure 5)

4.2 Profitability

Seen in Table 3 is that if income is based alone in recruitment commission, the compensation plan would yield a negative average income across all distributors. That translates to an average of about 4,000 income including direct selling, assuming all distributors have sold their products at 50% mark-up and none of them have replenished their supplies. This supports the fraudulence of profit from a pyramid scheme since income from this marketing strategy solely on commissions from recruitment. Again based solely on recruitment compensation, Table 4 shows the percentage of distributors who profited from recruitment commissions. Results show that on the average, only 6.41% distributors positively benefited from the recruitment commissions.

Table 4. Percentage Distribution of Distributors who Profit from Recruitment Commissions

Scenario	Percentage	Scenario	Percentage
Poi5	4.76%	Poi11	6.20%
Poi6	6.43%	Poi12	5.92%
Poi7	7.88%	Poi13	6.31%
Poi8	6.32%	Poi14	6.32%
Poi9	6.85%	Poi15	6.51%
Poi10	6.7%	W. Ave	6.41%

Table 5 shows the distribution of income among the earliest percentile of individuals who joined the MLM network. Another finding in the simulation is that the distributor income is constant across all scenarios, something which is very much in contrast with the net income of the network marketing organization. The NMO income increases exponentially as recruitment strength increases. For all Poisson parameter values, the distribution is positively skewed – the earlier an individual joins, the larger her profit would be. Of course this is to be expected since the assumptions in the simulations is that the attrition rate will increase so that those at the later levels would find it more difficult to recruit.

Table 5. Income Distribution among the Earliest Members of the MLM Structure by Network Strength

		Member Proportion					Skewness
		1%	5%	10%	20%	50%	
Network Strength	Poi5	27.94	44.49	48.51	55.62	67.59	2.4757
	Poi6	27.47	48.21	55.61	63.51	73.85	1.8577
	Poi7	19.66	33.2	40.19	48.6	64.14	2.6409
	Poi8	34.09	51.94	57.62	63.62	74.9	2.6533
	Poi9	41.58	51.19	54.34	58.77	67.88	3.0996
	Poi10	48.97	57.71	61.68	66.35	71.64	3.6143
	Poi11	51.68	63	67.64	71.13	75.74	1.9185
	Poi12	59.53	67.34	69.85	71.74	76.09	3.2784
	Poi13	62.57	69.62	71.53	73.26	78.73	3.5662
	Poi14	73.43	77.34	78.31	80.11	84.71	3.8345
	Poi15	71.01	73.77	75.3	77.69	82.39	3.4204

For higher *Poi(14)* and *Poi(15)* scenarios, there seem to be inconclusive evidence of a Pareto 80-20 earning distribution where 80% of the wealth is owned by 20% of its members. On all simulation scenarios nonetheless have the earliest 20% members owning more than 50% of the income.

4.3 Other simulations

Another simulation is done, this time using a different specification for the uniform distributions: *Uni(1,1)* for level 1, *Uni(0,0.50)* for levels 2 to 5 and *Uni(0, 0.20)* for all succeeding levels. The *Uni(0, 0.50)* is used for the growth of the network. In this simulation, *Poi(10)* is used. Table 6 shows that the results are not that very different from the results of *Poi(10)* in Table 3. It is interesting to note that even though the uniform specifications are changed, the average distributor income remains at the 4,000 level.

Table 6. Summary of the Effect of Parameters on Network Growth Topology and Profitability

	Network Topology				Income	
	Recruitment	Members	Maturity	Life	Distributor	NMO
Main Effects					Remains constant regardless of specification	Increases exponentially as recruitment strength increases
as Poisson ↑	Increases as direct effect	Increases because of recruitment increase	Takes longer to peak	Longer due to increase in members		
as Uniform ↓	Decreases because of higher attention	Decreaces as a direct effect	Speeds up maturity, leading to decline	Shortens life due to higher attrition		
Interactions						
Poi Low, Uni Low	Low recruitment and high attrition		Peaks very fast and very low	Dies very fast, death is suddent		
Poi Low, Uni Moderate	Low but allows for recruitment increaese, with break times		Peaks very fast and low	Dies fast, with shorth decay time		
Poi Low, Uni High	Exponential increase in recruitment		Peaks fast but moderately high	Dies fast, fast then slow decay		
Poi High, Uni Low	High recruitment even at high attrition		Peaks fast but high	Long life, deacay is linear		
Poi High, Uni Moderate	High since sheer volume of recruits overpowers attrition		Peaks fast but very high	Long life, exponential decay		
Poi High, Uni High	High and exponential		Peaks very high with fast, then slow movement	Long life, short decay		

Table 7. Summary of Simulation Results 2

Number of members	2,117	Maximum Network Level	97
Number of recruits (REC)	25,402	Maximum Distributor NetInc	36,200
Sim Time (Mins,)	2	Level of Distribution with Max NetInc	2
Mean Distributor NetInc (DS+Rec)	3,991.78	Total Pay-In (1000s)	10,585,00
Mean Distributor NetInc (Rec only)	-3,508.22	NMO NetInc (1000s)	370.24

5. Conclusions and Future Directions

The researchers have successfully simulated unilevel MLM structures based on realizations of probability distributions. From the simulated structures, the dynamics between the fundamental characteristics of this network structure is analyzed, specifically on the recruitment and attrition rates, maturity and age of the network. This can serve as a baseline study for simulation MLM networks based on probability distributions.

As the average number of recruits is increased, the total number of members, number of levels and the net income of the company exponentially increased. However, the average net income of the distributor members was found to be almost the same among the simulated systems.

Interacting the Poisson parameter and the uniform parameter results to different shapes of member distribution across levels in the network.

Members belonging to the first levels of these systems were found to more likely to profit from MLM. There is an overall downward trend in terms of the average and maximum net income per level throughout the MLM network. Considering only commissions from recruitment, only around 6.5% of the members profited from the MLM network.

We are aware that the results presented in this study are based on simulations. Although the fundamental dynamics are given, real data is very essential for the advancement of this study for four main reasons: (i) actual data can be used to estimate the parameters which can be used in the simulation like the pay-in probability, the average number of potential members and pay-ins, and even an estimate of direct sales income, (ii) actual data may be used in order to assess how the simulated data deviate from the actual data, (iii) actual data may also be used to validate the assumptions made on the simulation of the MLM network, and lastly (iv) these actual data can provide verifications as to the distributional assumptions in the simulations, given more information, one may replace the Poisson parameter with say, a zero-inflated or a negative binomial parameter. Recruitment and direct selling are treated here as two independent entities, but in reality are very much related. One alternative compensation plan which can be considered is direct selling plus commission from downline sales volume, not recruitment.

A major limitation is the computing power and other hardware capabilities of today's computers. Generating larger and more complicated MLM structures take up larger space and longer time to process.

Another challenge for future study is to simulate other MLM compensation plans, such as the binary plan and compare the network growth topology and profitability of the different schemes. This is particularly useful to maximize the profit of individuals who want to join network marketing businesses.

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