

Ralph L. Levine
Michigan State University
May, 2002

Basic Model Equations of Team Dynamics – Base Run

Level Acceptance_Div_Ideas

init Acceptance_Div_Ideas = 20

flow Acceptance_Div_Ideas = -dt*Loss_Of_AcceptDiv
+dt*Ch_in_Accept

doc Acceptance_Div_Ideas = The degree in which members tolerate diversity in ideas and personalities, etc. This is a stock of openness. At the moment this is principally an aggregated level or stock in the model.

Level Burnout

init Burnout = 0

flow Burnout = -dt*DissOf_Brnout
+dt*BrnoutGeneration

doc Burnout = This fatigue process is modeled as a first order material delay.

Level Care Respect

init Care_Respect = 10

flow Care_Respect = +dt*ChIn_CareForTeam_Members

doc Care_Respect = How strongly members care for each other. This is a stock that represents a more emotional side of team members.

Level Clarity_Of_Vision

init Clarity_Of_Vision = 10

flow Clarity_Of_Vision = +dt*IncInVision
-dt*DecrIn_Vision

doc Clarity_Of_Vision = Deals with how clear the vision of the team is to the team members. This model does not deal with the overall vision of the company as a whole and the potential gap between the company's vision and that of the team.

Level Commitment

init Commitment = 20

flow Commitment = -dt*Loss_of_Commit
+dt*Gain_Of_Commit

doc Commitment = A key stock in the model reflecting the readiness and motivation of potential team members to accept the concept of a self-directed team.

Level Empowerment

init Empowerment = 10

flow Empowerment = +dt*In_In_Empowr
-dt*LossOf_Empowr

doc Empowerment = The feeling of self-efficacy and ability to be free to take on new challenges.

Level External_Resources

init External_Resources = .25

flow External_Resources = $-dt * \text{DecIn_ExtResrs}_1$
 $+dt * \text{IncInExt_Resrs}$

doc External_Resources = Resources, such as time, money, and equipment from sources outside of the company.

Level Indicated_Goals

init Indicated_Goals = 60

flow Indicated_Goals = $+dt * \text{IncrIn_TLevAspir}$
 $-dt * \text{Erosion_Of_Goal}$

doc Indicated_Goals = Goals that are indicated by the general level of competition in the business environment. Note that this is without considering the resources needed to meet the team's goals.

Level InfAbout_CBaseYCompet

init InfAbout_CBaseYCompet = 10

flow InfAbout_CBaseYCompet = $+dt * \text{IncIn_Inform}$
 $-dt * \text{LossOf_Inform}$

doc InfAbout_CBaseYCompet = This state variable represents External Information of client base and what the competitors are doing. I have initially set it quite low because before forming self-directed teams, information was held "close to the vest". Currently it is being modeled as a first order material delay.

Level Internal_Resources

init Internal_Resources = 25

flow Internal_Resources = $+dt * \text{ChangeIn_Res}$

doc Internal_Resources = Resources, such as time, money, and equipment from sources internal to the company.

Level Knowledge

init Knowledge = 20

flow Knowledge = $+dt * \text{Learning_about_New_tasks}$
 $-dt * \text{Loss_Of_Knowledge}$

doc Knowledge = Knowledge about self-directed teams. This is non-experiential accumulated knowledge for the most part.

Level Level_of_Tm_Function

init Level_of_Tm_Func = 10

flow Level_of_Tm_Func = $-dt * \text{Dec_InTm_Func}$
 $+dt * \text{Inc_In_Tm_Func}$

doc Level_of_Tm_Func = Level of Team Functioning. Overall indicator of how well the team is working with each other, with the rest of the organization, and with the

external customer/client base. Note: Increases in the Level_of_Tm_Func feeds upon itself, and thus has a self-loop. This is consistent with Mihaly Csikszentmihalyi's "flow" concept.

Level Loyalty

init Loyalty = 20

flow Loyalty = $-dt * \text{OutRt_Loyal}$
 $+dt * \text{InR_Loyal}$

doc Loyalty = The degree of loyalty towards the team, its members, as well as loyalty to the company. At the moment, this is an aggregated stock.

Level Memb_Skills

init Memb_Skills = 10

flow Memb_Skills = $-dt * \text{DecInTLrdshpSkills}$
 $+dt * \text{IncrInTlrdshpSkills}$

doc Memb_Skills = An aggregated stock of skills that are related to the tasks done by the team over time.

Level Member_Ambiguity

init Member_Ambiguity = 90

flow Member_Ambiguity = $-dt * \text{Loss_of_Mem_Amb}$

doc Member_Ambiguity = his version of the model assumes that preteam performance generates much ambiguity, which can decrease over time as the potential team members obtain knowledge of self-directed teams.

Level Member_Communication

init Member_Communication = 20

flow Member_Communication = $-dt * \text{Loss_of_Commun}$
 $+dt * \text{Gain_In_MembComm}$

doc Member_Communication = The degree in which members are able to communicate with each other, the rest of the organization, and to the outside customer/clients/supplier stakeholders.

Level Mutual_Accountability

init Mutual_Accountability = 20

flow Mutual_Accountability = $-dt * \text{Decr_In_Acc}$
 $+dt * \text{Inc_Acc}$

doc Mutual_Accountability = The degree that members hold each other accountable for their actions and performance behavior.

Level Performance

init Performance = 40

flow Performance = $+dt * \text{InIc_Perf}$
 $-dt * \text{LossOf_Perf}$
 $+dt * \text{PreTeam_PerfChRate}$

doc Performance = This is the generic **performance level** or attainment that would vary from team to team and company to company.

Level Team_Spirit

init Team_Spirit = 20

flow Team_Spirit = $-dt * \text{LossOf_TSpirit}$
 $+dt * \text{IncIn_TSpirit}$

doc Team_Spirit = An intense identification with the team in which work is a vocation and people on the team have a large sense of connectedness with other team members. This is congruent with Russ Moxley's use of the term "spirit."

Level Team_Zeal

init Team_Zeal = 20

flow Team_Zeal = $+dt * \text{GainZl}$
 $-dt * \text{Loss_of_Zl}$

doc Team_Zeal = The degree of intense happiness and dedication in performing tasks as a team member.

Level TeamSize

init TeamSize = Desired_Team_Size

flow TeamSize = $+dt * \text{Gen_Hire_Rate}$
 $-dt * \text{Quit_Fire_Rate}$

doc TeamSize = The size of the team

Level Trust_In_Team_Ldr

init Trust_In_Team_Ldr = 20

flow Trust_In_Team_Ldr = $-dt * \text{DecreaseIn_Team_Ldr}$
 $+dt * \text{Inc_In_Team_Ldr}$

doc Trust_In_Team_Ldr = The amount of trust the team members have in the team leader. Very important especially in the formation phase.

Level Trust_In_Team_Members

init Trust_In_Team_Members = 20

flow Trust_In_Team_Members = $+dt * \text{IncInTrust_Of_Team}$
 $-dt * \text{Dec_In_Trust}$

doc Trust_In_Team_Members = The degree of trust members feel about each other.

Flow BrnoutGeneration =

$((\text{Base_Burnout_Rt} * \text{Ef_PostLaunchHPM_On_Burn}) * \text{Limits_To_Burnout}) * \text{On_Off} + 1$

Flow Ch_in_Accept =

$\text{Acceptance_Div_Ideas} * \text{Ef_MemTrust_On_AcceptDiv} * \text{EfComm_On_Acceptance} * \text{Fr_Di}$
ver

Flow ChangeIn_Res =

$(\text{AminTarget_Resources} - \text{Internal_Resources}) / \text{TimeToGet_Resources}$

doc ChangeIn_Res = Standard stock adjustment process.

Flow ChIn_CareForTeam_Members =
(EffTrustOn_Care-Care_Respect)/TimeToCareForTeam_Membrs

Flow Dec_In_Trust =
(Trust_In_Team_Members/TmTodec_Trust)*EffCare_On_Decr_Trust

Flow Dec_InTm_Func = Level_of_Tm_Func/Time_to_Dec_Tm_Func*Scale_Limit

Flow DecIn_ExtResrs_1 = External_Resources/Tm_To_Dissp_ExRes

Flow DecInTLrdrrshpSkills = (Memb_Skills/TimeToLose_TLshpSkills)*On_Off

Flow Decr_In_Acc = (Mutual_Accountability/Time_To_Lose_Account)*On_Off

Flow DecreaseIn_Team_Ldr = Trust_In_Team_Ldr/Time_toDecTrust_In_T_Ldr

Flow DecrIn_Vision =
Clarity_Of_Vision/(TmTp_Dissp_Vision*Eff_Man_Bound_On_Keeping_vision)

Flow DissOf_Brnout = (Burnout/Tm_to_DEDBurn)*Limits_To_Burnout

Flow Erosion_Of_Goal = (Indicated_Goals/TimeDecGoal)*On_Off

Flow Gain_In_MembComm =
CoupFrCommun*EfZeal_on_M_Commun*EfAcceptDiv_On_Commun*EfSkills_Tech
noON_Commun*EfMemTrust_On_Commun*Member_Communication

Flow Gain_Of_Commit =
(Commitment*CompFrac_for_Committ*EfAm_On_Commit*EfftrustOn_Commit*EfNQ
ROn_Commit*Ef_Kn_on_Commit*EfResrcOn_Commit)*ScaleLimit

Flow GainZl = CompFracZl*Team_Zeal

Flow Gen_Hire_Rate =
(Desired_Team_Size-TeamSize)/Time_To_Fill_General_Positions

Flow In_In_Empowr =
Base_EmpRt*EfTot_Res_On_Emp*EfNewQualOn_Emp*Effect_MemSkls_On_Empr*E
f_InfClienta_and_Compert_on_Emp*Empowerment

Flow Inc_Acc =
(Base_Inc_In_Account*Ef_ClarifyVis_On_Acc*EfCommitOnAccnt*Mutual_Accountab
ility)*On_Off

Doc Increase in Accountability

Flow Inc_In_Team_Ldr =
CompFrac_TrustLdr*EfControl_On_TrustTL*Ef_ResrceOnTrust*Trust_In_Team_Ldr

Flow Inc_In_Tm_Funct =
FracCompLTFunct*EfEffctv_Res_On_LTFunc*EfM_SkillsOn_LTFunc*EfInOnFunc*EfCommunOn_T_Func*EfCIVis_On_LTFunc*Level_of_Tm_Func*Scale_Limit

Doc Increase in Level of Team Functioning

Flow IncIn__Inform =
(Base_Inform_rate*Ef_Managing_BndryOn_Inf*Ef_LT_FunctOnInfCBase)*On_Off

Flow IncIn_TSpirit =
(CompFrac_IncT_Sprt*EfEmprw_OnTSpirit*EfCareOn_Spirt*Ef_LFunctOn_T_Spirit*Team_Spirit)*On_Off

Flow IncInExt_Resrs =
Ef_EmpOn_ExRes*Ef_LvTm_FunctOn_ExRes*EfInf_Clients_Compert_On_EXRes*EfLdrTrust_On_ExternRes*BaseInc_In_ExtRes*EfGain_OnExt_Res

Flow IncInTrust_Of_Team =
Trust_In_Team_Members*Ef_Acc_On_Trust_in_Tm_Membs*EfAccepDivtOn_Trust*EfKno_of_RoleOnMemTrust*EfGoal_On_Trust_Tm*BaseIncTrustInTeam

Flow IncInVision =
FractCompCVis*EMemb_Skills_On_Vision*EfKnowAbt_T_on_Vis*Clarity_Of_Vision

Flow IncIn_TLevAspir =
(GoalMultiplier*Indicated_Goals*EfMemTrust_On_Goals)*On_Off

Flow IncInTlrdshpSkills =
(BaseInc_InMembSkls*EfVis_On_MembSkills*EfManagBoundOn_Skls*GoalOnMemb_Skills*Memb_Skills)*On_Off

Flow Inc_Perf = (Tm_Gap/(Time_For_Perf))*Ef_Rel_GainOnPerf*On_Off
aux InR_Loyalt =
CompFrac_Level*Loyalty*EfCareOn_Loyalty*Ef_Trust_InTmLdr_On_Loyalty*On_Off
+.5

Flow Learning_about_New_tasks =
FrIncIn_learn*EfTaskRatioOnLearning*Knowledge*EfCommit_on_GainKn*Ef_Ambig_On_Know

Flow Loss__of_Commit = (Commitment/CommitConstraint)*ScaleLimit

Flow Loss_Of_Knowledge =
(Knowledge/Time_To_Loose_Kn)*EfCommit_On_LossKn

Flow Loss_Of_AcceptDiv = Acceptance_Div_Ideas/Constraint_On_Diversity

Flow Loss_of_Commun = Member_Communication/Time_ToLose_Commun

Flow Loss_of_Mem_Amb =
(Member_Ambiguity/Time_For_Loss_ofAmb)*EfKnOn_Am

Flow Loss_of_Zl = Team_Zeal/(Constraint_onZeel*EfSpOnZeal1)

Flow LossOf_Empowr = Empowerment/Tm_To_Lose_Emp_SlfEfficacy

Flow LossOf_Infom = (InfAbout_CBaseYCompet/Tm_To_Lose_Inf)*On_Off

Flow LossOf_Perf =
(Performance/(Time_for_Loss_of_Perf))*EfAch_Ooport_OnPerf*On_Off

Flow LossOf_TSpirit = (Team_Spirit/Constraints_On_TSpirit)*On_Off

Flow OutRt_Loyal = Loyalty/(ConstraintOn_Loyalty*Spirit_OnLoyalty)*On_Off

Flow PreTeam_PerfChRate =
(EfOldGapOnO_Perf/PerformTime)*EfTmSizeOn_PreTmPerf*(1-On_Off)

Flow Quit_Fire_Rate = TeamSize/Av_Timeto_Leave

aux Actual_HPM = On_Off*Indicated_HPM + (1-On_Off)*BaselIne_HrsPerMnth

aux AltEf_Tm_Funct_On_ActlEffrrt = GRAPH(Level_of_Tm_Func,0,10,
[1.23,1.23,1.18,1.07,0.99,0.87,0.74,0.67,0.64,0.64,0.64"Min:0;Max:1.5"])
doc AltEf_Tm_Funct_On_ActlEffrrt = This is a bit different. If the level of
functioning is very low, it amplifies the effort it takes to get standard things done. The
values of the table function would be above 1.0. On the other hand, as the level of
function goes up, then it decreases the number of hours it takes to do most things.

aux AltHours_Mult = GRAPH(Tm_Gap,-6,4,
[1,1,1,1.03,1.11,1.19,1.2,1.22,1.22,1.22,1.22"Min:0;Max:2"])

aux Ambig_Gap = Tolorance_4_Ambig-Member_Ambiguity

aux Av_Timeto_Leave = EF_LoyaltyOn_QuitRt

aux CommitConstraint = GRAPH(Commitment,0,10,
[200,199,178,64,34,18.5,12.3,7.3,4,3.1,1"Min:0;Max:200"])

aux Constraint_On_Diversity = GRAPH(Acceptance_Div_Ideas,0,10,
[39.4,38.9,38.1,37.2,34.2,28.5,22.3,7.2,3.6,2.5,1.5"Min:0;Max:40"])

aux Constraint_onZeel = GRAPH(Team_Zeal,0,10,
[79.2,77,73.2,63,51.7,14.7,7.9,5.3,3.4,1.5,1.1"Min:0;Max:80"])

aux ConstraintOn_Loyalty = GRAPH(Loyalty,0,10,
[79.2,77,73.2,63,51.7,14.7,7.9,5.3,3.4,0.8,0.3"Min:0;Max:80"])

aux ConstraintOnGoals = GRAPH(Indicated_Goals,0,10,
[4000,4000,4000,4000,4000,4000,3980,3000,200,1,0.5"Min:0;Max:4000"])

aux Constraints_On_TSpirit = GRAPH(Team_Spirit,0,10,
[60,59.7,56.3,52.6,41.6,26.5,9.9,4.5,2.5,1.5,1"Min:0;Max:60"])

aux Ef_Acc_On_Trust_in_Tm_Membs = GRAPH(Mutual_Accountability,0,10,
[0.3,0.4,0.52,0.62,0.94,1.22,1.4,1.7,1.83,1.88,1.9"Min:0;Max:2"])

doc Ef_Acc_On_Trust_in_Tm_Membs = You need Mutual Accountabilty to trust members. It ranges from less than 1.0 to a value greater than 1.0.

aux Ef_Ambig_On_Know = GRAPH(Ambig_Gap,-100,10,
[2.84,2.7,2.46,2.08,1.74,1.49,1.34,1.2,1.09,1.03,1"Min:0;Max:3"])

doc Ef_Ambig_On_Know = The X axis deals with the Ambiguity Gap which is large at first and then goes down as the gap goes to zero. It starts with a negative gap, because the gap is defined as tolerance for Ambiguity - Ambiguity. Since Member Role Ambiguity is large initially, the gap will almost always be negative for most runs. The table function is large at first with a large negative gap, but goes down to 1.0 as the gap narrows.

aux Ef_Burn_On_IGoal = GRAPH(Burnout,0,10,
[1,1,1,1,0.99,0.89,0.8,0.73,0.65,0.61,0.61"Min:0;Max:1"])

doc Ef_Burn_On_IGoal = The effect of Burnout does not come into play until Burnout gets to be around 40 units and then it decreases the Indicated Goal by making the table function take on values which are below 1.0.

aux Ef_ClarityVis_On_Acc = GRAPH(Clarity_Of_Vision,0,10,
[0.7,0.77,1,1.23,1.37,1.46,1.5,1.51,1.51,1.53,1.53"Min:0;Max:2"])

doc Ef_ClarityVis_On_Acc = Low Clarity of vision, inhibits Accountability. The table function ranges from below 1.0 to > 1.0.

aux Ef_EmpOn_ExRes = GRAPH(Empowerment,0,10,
[0,0.02,0.83,0.93,0.96,0.97,0.98,0.99,0.99,1,1"Min:0;Max:1"])

doc Ef_EmpOn_ExRes = This table function was like the table function associated with the effect of Empowerment on raising the goal. With perfect empowerment, the value of the table function equal 1. while, when Empowerment is 0.0, the value of the

table function equals 0.0, because, if you are not empowered, you will not go after external resources.

aux Ef_InfClienta_and_Comet_on_Emp = GRAPH(InfAbout_CBaseYCompet,0,10,
[1,1,1,1.01,1.05,1.14,1.17,1.17,1.17,1.17,1.17"Min:0;Max:1.25"])

doc Ef_InfClienta_and_Comet_on_Emp = At first, information does not have much to do with empowerment, but as information about competition and outside resources increases, it can increase the feeling of empowerment.

aux Ef_Kn_on_Commit = GRAPH(Knowledge,0,10,
[1,1,1,1.02,1.08,1.16,1.24,1.3,1.39,1.41,1.41"Min:0;Max:2"])

doc Ef_Kn_on_Commit = If you have no knowledge about the team concept, you can still increase your Commitment if other factors come into play. So here the multiplier is 1.0 at low degrees of Knowledge and above 1 for more extreme degrees of Knowledge.

aux Ef_LFuncOn_T_Spirit = GRAPH(Level_of_Tm_Func,0,10,
[0.65,0.65,0.73,0.77,0.9,1.1,1.85,2.25,2.4,2.45,2.45"Min:0;Max:4"])

doc Ef_LFuncOn_T_Spirit = Low levels of Functioning inhibit spirit, while high levels generate spirit. Table function starts below 1.0 and then at high levels of functioning goes above 1.0.

aux EF_LoyaltyOn_QuitRt = GRAPH(Loyalty,0,10,
[13,16,19,26,71,204,464,555,586,600,600"Min:0;Max:600"])

doc EF_LoyaltyOn_QuitRt = Table function starts with low average time and increases time to loose team members as loyalty gets high.

aux Ef_LT_FunctOnInfCBase = GRAPH(Level_of_Tm_Func,0,10,
[1,1,1,1.02,1.08,1.22,1.37,1.47,1.49,1.49,1.49"Min:0;Max:1.74"])

doc Ef_LT_FunctOnInfCBase = At first, there is no effect of team functioning, but then as it increases, it helps to get information to the team.

aux Ef_LvTm_FunctOn_ExRes = GRAPH(Level_of_Tm_Func,0,10,
[1,1,1.06,1.2,1.43,2.94,3.25,3.3,3.3,3.3,3.3"Min:0;Max:4"])

doc Ef_LvTm_FunctOn_ExRes = If the team has a low Level Of Functioning, then they certainly will not increase in getting external forces. I let that value be equal to 1.0, assuming that the External Resource level variable was represented by a first order material delay in equilibrium. As the level of functioning goes up, the value of the table function goes up beyond 1.0.

aux Ef_Managing_BndryOn_Inf = GRAPH(Man_Bound,0,10,
[1,2.2,4.2,7,10.1,12.2,12.9,13,13,13,13"Min:0;Max:13"])

doc Ef_Managing_BndryOn_Inf = Low degrees of managing the boundary do not affect the baseline, but as Managing the Boundary increases, this type of guidance is quite helpful in getting information to the team.

aux Ef_MemTrust_On_AcceptDiv = GRAPH(Trust_In_Team_Members,0,10,
[0,0.08,0.2,0.61,0.9,1.03,1.25,1.64,1.82,1.87,1.89"Min:0;Max:2"])
doc Ef_MemTrust_On_AcceptDiv = No trust implies implies no growth of
Acceptance of Diverse Ideas. Goes from 0.0 to a value greater than 1.0.

aux Ef_PostLaunchHPM_On_Burn = GRAPH(Indicated_HPM,100,30,
[1,1,1,1.58,1.83,1.979,2,2,2,2,2"Min:0;Max:2"])
doc Ef_PostLaunchHPM_On_Burn = At first, low number of hours do not contribute to
burnout, but as hours increase, burnout will accumulate. The table function starts at a
value of 1.0 initially, but then goes up to a value of 2 as the number of work hours
increases.

aux Ef_Rel_GainOnPerf = GRAPH(Rel_GainHrs,-0.5,0.1,
[0.67,0.7,0.71,0.76,0.84,1,1.1,1.13,1.18,1.22,1.23"Min:0;Max:1.5"])
doc Ef_Rel_GainOnPerf = This is one of the variables which assumes that if you do
not have gain hours per month, you cannot increase beyond what you would have with
the standard effort. When the table function goes between 0 and 1, the factor inhibits the
growth of the state variable. When it goes above, 1.0 it helps to increase the input rate.

aux Ef_ResrceOnTrust = GRAPH(Resource_Ratio,0,0.1,
[0,0.02,0.03,0.03,0.04,0.05,0.14,0.92,1,1,1,1,1"Min:0;Max:1"])
doc Ef_ResrceOnTrust = This is the main source of variation in generating trust in the
team leader. Will there be resources available to get started. When the resource ratio,
equals 0.0, the multiplier = 0.0. The range goes from 0.0 to 1.0.

aux Ef_TmFuncOn_IndHPM = GRAPH(Level_of_Tm_Func,0,10,
[1,1,1,1,1,0.86,0.83,0.82,0.81,0.79,0.79"Min:0;Max:1.5"])
doc Ef_TmFuncOn_IndHPM = In this alternative, high level of functioning helps to
make the team more efficient and thus free up more hours for exploring external funding
sources.

aux Ef_Trust_InTmLdr_On_Loyalty = GRAPH(Trust_In_Team_Ldr,0,10,
[0.75,0.77,0.83,0.91,1.15,1.3,1.42,1.52,1.57,1.63,1.63"Min:0;Max:2"])
doc Ef_Trust_InTmLdr_On_Loyalty = Trust is a substitute for liking the leader. The
table function goes from below 1.0 to being above 1.0.

aux EfAcc_On_Goals = GRAPH(Mutual_Accountability,0,10,[-0.01,-0.0082,-
0.0062,-0.0044,-0.0025,-0.0001,0.0022,0.0048,0.007,0.0088,0.01"Min:-0.01;Max:0.01"])
doc EfAcc_On_Goals = Here we have a sense of mutual accountability. Low values of
accountability leads to lowering the goal. High values of accountability, on the other
hand, raises the goal or the bar.

aux EfAccepDivtOn_Trust = GRAPH(Acceptance_Div_Ideas,0,10,
[0.76,0.79,0.83,1.02,1.25,1.54,1.62,1.64,1.64,1.64,1.64"Min:0;Max:2"])

aux EfAcceptDiv_On_Communic = GRAPH(Acceptance_Div_Ideas,0,10,
[0.68,0.68,0.69,0.71,0.76,0.83,0.99,1.04,1.19,1.21,1.27"Min:0;Max:1.5"])
doc EfAcceptDiv_On_Communic = Low acceptance of diverse ideas tends to inhibit
communication while high acceptance tends to increase communication.

aux EfAch_Opport_OnPerf = GRAPH(Man_Bound,0,10,
[1,1,1,1,0.99,0.85,0.58,0.34,0.07,0,0"Min:0;Max:1"])

aux EfAm_On_Commit = GRAPH(Member_Ambiguity,0,0.1,
[1,1,1,0.99,0.86,0.83,0.83,0.83,0.83,0.83,0.83"Min:0;Max:1"])
doc EfAm_On_Commit = high degrees of Ambiguity inhibit the growth of
Commitment, but low degrees do not have much if any effect on increasing Commitment.

aux EfCareOn_Loyalty = GRAPH(Care_Respect,0,10,
[0.24,0.27,0.33,0.62,1.01,1.13,1.21,1.4,1.83,1.88,1.89"Min:0;Max:2"])
doc EfCareOn_Loyalty = Care for team members is a very process for loyalty, but
zero care can still generate some loyalty. Table function starts below 1.0 and extends
above 1.0.

aux EfCareOn_Spirit = GRAPH(Care_Respect,0,10,
[0.29,0.36,0.41,0.49,0.71,1,1.07,1.25,2.26,2.39,2.43"Min:0;Max:3"])
doc EfCareOn_Spirit = If you do not care for each other, then there cannot be much
growth in team spirit. The range of the table function goes from below 1.0 to above 1.0.

aux EfClVis_On_LTFunc = GRAPH(Clarity_Of_Vision,0,10,
[0.41,0.79,0.92,0.96,0.98,1,1.33,1.97,2.18,2.26,2.29"Min:0;Max:3"])
doc EfClVis_On_LTFunc = The Clarity of Vision inhibits the growth of Level of T
Function when it is low, but enhances the growth when Clarity of Vision is high. The
table function ranges from below 1.0 to above 1.0.

aux EfComm_On_Acceptance = GRAPH(Member_Communication,0,10,
[0.72,0.72,0.74,0.76,0.81,0.92,1.2,1.29,1.35,1.38,1.39"Min:0;Max:1.5"])
doc EfComm_On_Acceptance = Goes from a pt below 1.0 to a pt above 1.0

aux EfCommit_on_GainKn = GRAPH(Commitment,0,10,
[0,0.01,0.04,0.06,0.15,0.71,1.2,1.41,1.57,1.61,1.62"Min:0;Max:2"])
doc EfCommit_on_GainKn = This is one of the variables which assumes that if you
do not have Team Commitment, you cannot learn anything. When the table function
goes between 0 and 1, the factor inhibits the growth of the state variable. When it goes
above, 1.0 it helps to increase the input rate.

aux EfCommit_On_LossKn = GRAPH(Commitment,0,10,
[1.27,1.25,1.17,1,1,1,1,1,1,1"Min:0;Max:1.5"])
doc EfCommit_On_LossKn = I have assumed that low commitment, helps to increase
the loss of Knowledge.

aux EfCommitOnAcct = GRAPH(Commitment,0,10,
[0,0.12,0.25,0.63,1.13,1.56,1.81,1.85,1.9,1.93,1.94"Min:0;Max:2"])
doc EfCommitOnAcct = Commitment of the team is a necessary condition. No
Commitment implies no increase in Mutual Accountability. The multiplier ranges from
0.0 to a number above 1.0

aux EfCommunOn_T_Func = GRAPH(Member_Communication,0,10,
[0.79,0.78,0.79,0.81,0.88,1,1.4,2.19,2.33,2.39,2.42"Min:0;Max:3"])
doc EfCommunOn_T_Func = Low degrees of Communication inhibit T Functioning,
while high degrees of Communition enhances it . The table function starts below 1.0 and
then rises above 1.0 for high degrees of Communiication.

aux EfControl_On_TrustTL = GRAPH(Memory_Of_Control,0,10,
[1,1,1,0.94,0.68,0.35,0.18,0.1,0.1,0.1,0.1"Min:0;Max:1"])
doc EfControl_On_TrustTL = If control is very high, then the members are getting a
direct and symbolic message that this will not be a self-directed group. How can they
trust the leader when he or she is still controlling? Thus, if control is low, the multiplier
=1.0, but goes down as control increases toward 100.

aux EfEffctv_Res_On_LTFunc = GRAPH(Effective_Tot_Res,0,10,
[0,0.03,0.03,0.06,0.1,0.17,0.29,0.46,0.74,1.25,1.32"Min:0;Max:2"])
doc EfEffctv_Res_On_LTFunc = No resources makes the table function equal to 0.0.
High or adequate resources makes the table function attain a value above 1.0.

aux EfEfftv_Tot_Rs_OnAspir = GRAPH(Effective_Tot_Res,0,10,
[0.76,0.83,0.85,0.87,0.9,0.94,0.96,0.98,1.08,1.15,1.17"Min:0;Max:1.5"])
doc EfEfftv_Tot_Rs_OnAspir = If one does not have the resources to do the job, the
Level of Aspiration would be lower than the intended goal. The table function value
would be less than 1.0. On the other hand, if the resources are adequate, then the Level
of as piration will be above the intended goal.

aux EfEmp_On_Goals = GRAPH(Empowerment,0,10,
[0,0.02,0.03,0.03,0.04,0.07,0.17,0.85,0.95,0.99,1"Min:0;Max:1"])
doc EfEmp_On_Goals = Empowerment allows one to do something. It is self-
efficacy. On the other hand, if empowerment is low, then the multiplier will be below
1.0. We have set the max value at 1.0, at perfect empowerment. If you are empowered,
you still may not increase the goal, so we set the maximum value at 1.0, instead of
being greater than 1.0.

aux EfEmprw_OnTSpirit = GRAPH(Empowerment,0,10,
[0.77,0.78,0.81,0.87,1,1.3,2.15,2.36,2.45,2.45,2.45"Min:0;Max:4"])

aux Eff_Man_Bound_On_Keeping_vision = GRAPH(Man_Bound,0,10,
[0.61,0.62,0.67,0.83,1,1.05,1.08,1.08,1.1,1.11,1.13"Min:0;Max:2"])
doc Eff_Man_Bound_On_Keeping_vision = Managing the Boundaries helps to keep
and guide Clarity of Vision. It ranges from below 1.0 to above 1.0. When the table

function is less than 1.0 it decrease Vision, while it will increase or maintain Clarity of Vision for high values of Managing the Boundary.

aux EffCare_On_Decr_Trust = GRAPH(Care_Respect,0,10,
[1,1,1,0.99,0.97,0.96,0.96,0.95,0.94,0.94,0.94"Min:0;Max:1"])

doc EffCare_On_Decr_Trust = This is a discounting processes. When care is high, the multiplier is less than 1.0. It slows down the loss of trust.

aux Effect_MemSkls_On_Empr = GRAPH(Memb_Skills,0,10,
[0.28,0.4,0.99,1.2,1.51,1.72,1.89,1.98,2.02,2.08,2.08"Min:0;Max:2.5"])

doc Effect_MemSkls_On_Empr = One can become empowered slightly with no Skills, but I the value of the multiplier is close to 0.0. It starts below 1.0 and eventually goes above 1.0. Thus it inhibits and enhances growth.

aux Effective_Tot_Res = TrustFilterOn_Tot_Res*Total_Resources

aux EffTrustOn_Care = GRAPH(Trust_In_Team_Members,0,10,
[4,7,9,15,24,35,47,59,80,90,100"Min:0;Max:100"])

aux EfftrustOn_Commit = GRAPH(Trust_In_Team_Ldr,0,10,
[0.04,0.14,0.48,0.95,1.12,1.19,1.24,1.25,1.3,1.31,1.31"Min:0;Max:2"])

doc EfftrustOn_Commit = This is one of the variables which assumes that if you do not have trust in the team leader, you cannot become Committed. When the table function goes between 0 and 1, the factor inhibits the growth of the state variable. When it goes above, 1.0 it helps to increase the input rate.

aux EfGain_OnExt_Res = GRAPH(Rel_GainHrs,-0.5,0.1,
[0,0,0,0,0,1.57,1.76,1.85,1.87,1.87"Min:0;Max:2"])

doc EfGain_OnExt_Res = Relative gain represent slack hours to apply to gaining additional resources that are external to the company.

aux EfGoal_On_Trust_Tm = GRAPH(New_QualityRatio,0.6,0.1,
[0.62,0.65,0.7,1.04,1.5"Min:0;Max:1.5"])

doc EfGoal_On_Trust_Tm = In this situation, reaching the goal has a positive effect on generating in fellows team members. In this case, a low ratio tends to inhibit trust, but as the team moves toward reaching the goal, trust increases.

aux EfInf_Clients_Compert_On_EXRes = GRAPH(InfAbout_CBaseYCompet,0,10,
[0.26,0.31,0.36,0.41,0.53,0.9,1,1,1,1"Min:0;Max:1"])

doc EfInf_Clients_Compert_On_EXRes = Low information can inhibit the generation of External Resources. High information can enhance the generation of External Resources.

aux EfInOnFunc = GRAPH(InfAbout_CBaseYCompet,0,10,
[1,1,1.01,1.07,1.3,1.7,1.84,1.95,1.98,2,2"Min:0;Max:2"])

doc EfInOnFunc = The table fuction starts at 1.0 and then goes above a value of one for high degrees of Extental information.

aux EfKno_of_RoleOnMemTrust = GRAPH(Knowledge,0,10,
[0.5,0.61,0.7,0.84,0.99,1.21,2.11,2.46,2.6,2.67,2.69,2.69"Min:0;Max:3"])
doc EfKno_of_RoleOnMemTrust = Ranges from below 1.0 to above 1.0

aux EfKnOn_Am = GRAPH(Knowledge,0,10,
[0,0.05,0.13,0.25,0.5,1,2.4,4.3,17.8,19.5,20"Min:0;Max:20"])
aux EfKnowAbt_T_on_Vis = GRAPH(Knowledge,0,10,
[1,1,1.08,1.15,1.27,1.56,1.85,2.05,2.15,2.17,2.17"Min:0;Max:3"])
doc EfKnowAbt_T_on_Vis = Lack of Knowldge does not have an effect on clarity of vision, but as Knowledfe increases, it has more impact on Clarity of vision. The table function ranges from 1.0 to above 1.0.

aux EfLdrTrust_On_ExternRes = GRAPH(Trust_In_Team_Ldr,0,10,
[0,0.02,0.04,0.08,0.14,0.21,0.32,0.73,0.88,0.94,1"Min:0;Max:1"])
doc EfLdrTrust_On_ExternRes = No trust in leader generates 0.0 table function value. As trust in leader increases, then the value of the table function approaches 1.0.

aux EfM_SkillsOn_LTFunc = GRAPH(Memb_Skills,0,10,
[1,1,1,1.01,1.04,1.08,1.23,1.4,1.49,1.51,1.52"Min:0;Max:2"])
doc EfM_SkillsOn_LTFunc = The table fuction starts at 1.0 and then goes above a value of one for high degrees of Skills.

aux EfManagBoundOn_Skls = GRAPH(Man_Bound,0,10,
[0.39,0.42,0.45,0.6,1.01,1.1,1.34,1.45,1.49,1.49,1.49"Min:0;Max:1.5"])
doc EfManagBoundOn_Skls = Poor management can waste time getting the wrong skills. This falls under both guidance and opportunity. The range of the table is below 1.0 to greater than 1.0.

aux EfMemTrust_On_Communicat = GRAPH(Trust_In_Team_Members,0,10,
[0.63,0.65,0.71,0.95,1.03,1.13,1.35,1.65,1.84,1.9,1.91"Min:0;Max:2"])
doc EfMemTrust_On_Communicat = Lack of trust will inhibit communication, while high degrees of T member trust will enhance Communicaton.

aux EfMemTrust_On_Goals = GRAPH(Trust_In_Team_Members,0,10,
[0,0,0.03,0.06,0.63,0.95,1,1,1,1,1"Min:0;Max:1"])
doc EfMemTrust_On_Goals = This is one of the variables which assumes that if you do not have trust in the team, you cannot raise the goal. When the table function goes between 0 and 1, the factor inhibits the growth of the state variable. When it goes above 1.0, it helps to increase the input rate.

aux EfNewQualOn_Emp = GRAPH(New_QualityRatio,0.6,0.1,
[1,1.15,2.08,2.21,2.21"Min:0;Max:2.5"])
doc EfNewQualOn_Emp = Empowerment increases with success. Thus, when the ratio = 0.0, the multiplier = 1.0, and as it increases to 1.0, success, it increases empowerment. This is the opposite of the situation where the small ratios generate action to close the gap.

aux EfNQROn_Commit = GRAPH(New_QualityRatio,0.6,0.1,
[8,7.74,7.28,1.89,1.27,1.11,1.08,1.05,1.04,1.02,1.01"Min:0;Max:8"])
doc EfNQROn_Commit = A low ratio implies that the organization is in big trouble. It needs to do something to "bridge the gap", so to speak. In this situation, a low ratio drives the increase in Commitment. The smaller the ratio, the more likely the team will be committed to the team concept. When the New_Quality Ratio gets to be 1.0, then there is still some influence of Performance, but this is only a little bit above 1.0.

aux EfOldGapOnO_Perf = GRAPH(Perf_Gap,-50,10,
[0,0,0,0,0,10,20,30,40,50"Min:0;Max:50"])
doc EfOldGapOnO_Perf = This table function is set up so that if Performance is below the Old Standard, the system will try to raise performance. On the other hand, for negative values of the Perf_Gap, the system will not try to decrease performance down to the old standard. There will not be an effort to ever lower performance.

aux EfResrcOn_Commit = GRAPH(Effective_Tot_Res,0,10,
[0,0.03,0.04,0.1,0.16,0.34,0.54,2.18,2.24,2.26,2.25"Min:0;Max:3"])
doc EfResrcOn_Commit = This is one of the variables which assumes that if you do not have Resources, you cannot become Committed. When the table function goes between 0 and 1, the factor inhibits the growth of the state variable. When it goes above, 1.0 it helps to increase the input rate.

aux EfSkills_TechnoON_Communit = GRAPH(Memb_Skills,0,10,
[1,1.01,1.1,1.18,1.32,1.42,1.48,1.5,1.5,1.5,1.5"Min:0;Max:1.5"])
doc EfSkills_TechnoON_Communit = The table function starts at 1.0 and increases as Skills increase.

aux EfSp_OnZeal = GRAPH(Team_Spirit,0,10,
[0,0.1,0.2,0.4,0.8,1.8,8,10.8,11.7,12.3,12.4"Min:0;Max:15"])
doc EfSp_OnZeal = No Spirit, no Zeal. Low values of spirit inhibit Zeal, but large values of Spirit enhance Zeal.

aux EfSpOnZeal1 = GRAPH(Team_Spirit,0,10,
[0,0.1,0.2,0.4,0.8,1.8,8,10.8,11.7,12.3,12.4"Min:0;Max:13"])

aux EfTaskRatioOnLearning = GRAPH(Task_Ratio,0,0.1,
[1,1,1,1,1,1,1,0.32,0.11,0"Min:0;Max:1"])
doc EfTaskRatioOnLearning = This is one way to reach a stable point with a positive loop. As the task ratio goes near 1.0, namely when all the tasks are learned, the table function goes to 10.0. This prevents it from going negative.

aux EfTm_Size_On_HrperMnt = GRAPH(Rel_Tm_Size,0,0.1,
[1.27,1.25,1.24,1.22,1.19,1.11,1.06,1.04,1.03,1.01,1,1,1"Min:0;Max:1.4"])
doc EfTm_Size_On_HrperMnt = When the relative size of the team is low, then the number of hours goes up. As the relative size of the team goes down to one, the number

of hours goes down to 1.0. Finally, when the relative size is ideal, then the multiplier equal 1.0.

aux EfTmSizeOn_PreTmPerf = GRAPH(Rel_Tm_Size,0,0.1,
[0.54,0.56,0.57,0.59,0.62,0.65,0.67,0.74,0.82,0.91,1,1.09,1.1"Min:0;Max:1.5"])

aux EfTot_Res_On_Emp = GRAPH(Effective_Tot_Res,0,10,
[0,0.04,0.1,0.19,0.28,0.37,0.54,0.75,0.97,2.36,2.46"Min:0;Max:2.5"])

doc EfTot_Res_On_Emp = No resources, shuts off the input to the Empowerment variable. Resources below 1.0 inhibit empowerment and then after resources get to be about 80, the multiplier becomes greater than 1.0

aux EfVis_On_MembSkills = GRAPH(Clarity_Of_Vision,0,10,
[0.59,0.62,0.75,1.02,1.02,1.07,1.11,1.29,1.8,1.96,2"Min:0;Max:2"])

doc EfVis_On_MembSkills = This takes the function of guidance. The table function ranges from below 1.0 to above 1.0.

aux EfZeal_On_Brn = GRAPH(Team_Zeal,0,10,
[1,0.97,0.94,0.85,0.76,0.43,0.23,0.16,0.09,0.04,0.04"Min:0;Max:1"])

doc EfZeal_On_Brn = Low values of Zeal do not have an effect on the loss of burnout. However, as Zeal increases, the value of the table function decreases below 1.0, cutting down the product of the time constant and the table function. A decrease in this product, quickens the loss of Burnout.

aux EfZeal_on_M_Communi = GRAPH(Team_Zeal,0,10,
[1,1,1.01,1.04,1.08,1.16,1.25,1.32,1.35,1.36,1.37"Min:0;Max:1.5"])

doc EfZeal_on_M_Communi = Zeal has no effect at first, but later helps to increase Communication. The table function starts at 1.0 and then goes above 1.0.

aux EMemb_Skills_On_Vision = GRAPH(Memb_Skills,0,10,
[0.98,1,1,1.03,1.23,1.61,2,2.67,2.94,2.99,3"Min:0;Max:3"])

doc EMemb_Skills_On_Vision = Lack of skills does not have an effect on clarity of vision, but as Skills increase, it has more impact on Clarity of vision. The table function ranges from 1.0 to above 1.0.

aux GoalMultiplier = EfAcc_On_Goals*EfEmp_On_Goals

doc GoalMultiplier = Note the product of these two gives one the ability to show that if empowerment is low and a sense of accountability is low, then the bar is not raised, And, if empowerment is high and accountability is low, then the bar is also not raised.

aux GoalOnMemb_Skills = GRAPH(New_QualityRatio,0.6,0.1,
[1.99,1.84,1.63,1.35,1.17,1.06,1.02,1.02"Min:0;Max:2"])

doc GoalOnMemb_Skills = New QualityRatio motivates getting the skills necessary to do the job well. Low values of the ratio stimulate getting skills.

aux HoursMult = GRAPH(Tm_Gap,-6,4,
[1,1,1,1.03,1.06,1.07,1.07,1.07,1.07,1.07"Min:0;Max:2"])

aux Hrs_Gained = Baseline_HrsPerMnth-Actual_HPM
aux Indicated_HPM =
Baseline_HrsPerMnth*EfTm_Size_On_HrperMnt*AltHours_Mult*Ef_TmFuncOn_IndH
PM

aux Limits_To_Burnout = GRAPH(Burnout,0,10,
[1,1,1,1,1,1,1,1,0.9,0"Min:0;Max:1"])
doc Limits_To_Burnout = A way of keeping Burnout from going over 100 units.
aux Lv_AspirationPost_Launch = Indicated_Goals*EfEfftv_Tot_Rs_OnAspir

aux Man_Bound = GRAPH(TimeSeries,0,10,
[5,5,13,22,40,83,89,91,92,92,92"Min:0;Max:100"])
doc Man_Bound = First one should note that in this team dynamics model, the
variable is exogenous. It is an internal variable in the leadership model, i.e., in the
leadership model its values over time are determined internally. Man_Bound (Managing
the boundaries) is a variable that represents the team leader's ability to work well with
other parts of the organization, help the team get information from clients and customers,
as well as information about relevant competitor behavior.

aux Memory_Of_Control = GRAPH(TimeSeries_1,0,10,
[75,53.56,39.9,28.4,20.86,15.26,11.17,8.19,5.99,4,3"Min:0;Max:100"])

aux Net_Gain_Burnout = BrnoutGeneration-DissOf_Brnout

aux New_QualityRatio = Performance/(Lv_AspirationPost_Launch + .001)
doc New_QualityRatio = This is a relative performance index under realistically
changed competitive conditions.

aux OldQualityRatio = Performance/(Old_Standard + .001)
doc OldQualityRatio = Relative performance under conditions insulated from more
general competition.

aux On_Off = 0 +STEP(1,24)
doc On_Off = A necessary external switch to deal with the pre-formation and
formation stages of the evolution of the team. Note that this team model can be
connected with the team leadership model that internally determines if and when actual
teams come on line.

aux Perf_Gap = Old_Standard - Performance

aux Performance_Goal = On_Off*Lv_AspirationPost_Launch + (1-
On_Off)*Old_Standard

aux PerformTime = GRAPH(Memory_Of_Control,0,10,
[24,24,23,22.9,21.8,20.4,17.5,11.9,5.1,2,1.7"Min:0;Max:60"])

doc PerformTime = If the performance is below the old standard, the teams perception of the supervisor's control takes over, and the team is "whipped" into trying to go back to the old standard. Thus when perceived control is high, the delay is small. On the other hand, under the old standard, when the perceived control is low, the lag is longer.

aux Rel_GainHrs = Hrs_Gained/BaselIne_HrsPerMnth

doc Rel_GainHrs = Essential the percentage gained or lossed over or under the baseline hours per month which usually will be set at 160 hours per month per person.

aux Rel_Tm_Size = TeamSize/Desired_Team_Size

aux Resource_Ratio = Total_Resources/Initial_Team_Expected_Res

aux Scale_Limit = GRAPH(Level_of_Tm_Func,0,10,
[1,1,1,1,1,1,1,1,0.97,0.93,0"Min:0;Max:1"])

aux ScaleLimit = GRAPH(Commitment,0,10,
[1,1,1,1,1,1,1,1,0.93,0"Min:0;Max:1"])

doc ScaleLimit = Commitment is explosive!

aux Spirit_OnLoyalty = GRAPH(Team_Spirit,0,10,
[1,1,1.02,1.02,1.05,1.33,1.58,2.58,5.18,5.94,6"Min:0;Max:7"])

doc Spirit_OnLoyalty = Low degree of Spirit has no effect on loyalty, but it tends to shut off decreases in loyalty as Spirit increases. The table function starts at 1.0 and increases above that value as Spirit increases.

aux Task_Ratio = Knowledge/Total_Roles

aux Time_to_Dec_Tm_Func = GRAPH(Level_of_Tm_Func,0,10,
[41.8,41,38.4,36.1,32.5,26.5,15.3,10.4,5.5,3.8,1.8"Min:0;Max:45"])

doc Time_to_Dec_Tm_Func = If the system were to stop the team from functioning, then the level of functioning would decline with an average time of 9 months, assuming that the team were to go on for that time

aux Time_To_Lose_Account = GRAPH(Mutual_Accountability,0,10,
[23.9,25,24.8,24.6,21.5,18.5,15.2,10.4,3.8,1.5,1.2"Min:0;Max:25"])

aux Time_toDecTrust_In_T_Ldr = GRAPH(Trust_In_Team_Ldr,0,10,
[24.4,24.2,23.9,22.1,19.1,14,7.2,4.6,3.4,2.9,2.5"Min:0;Max:25"])

aux Time_ToLoose_Communic = GRAPH(Member_Communication,0,10,
[44.8,44.8,44.4,42.2,35.4,23.6,12.3,9.1,4.7,3.2,2.25"Min:0;Max:45"])

aux TimeDecGoal = Ef_Burn_On_IGoal*ConstraintOnGoals

aux TimeSeries = TIME

aux TimeSeries_1 = TIME

aux TimeToLose_TLshpSkills = GRAPH(Memb_Skills,0,10,
[23.9,23.8,23.7,22.6,21.5,18.5,14,10.4,4.5,2.4,1.7"Min:0;Max:25"])

aux Tm_Gap = Performance_Goal-Performance

aux Tm_to_DEDBurn = BsTime_ToDec_Burn*EfZeal_On_Brn

aux Tm_To_Lose_Emp_SlfEfficacy = GRAPH(Empowerment,0,10,
[23.9,23.8,23.7,22.6,21.5,18.5,14,6,1.5,0.9,0.4"Min:0;Max:40"])

aux TmTodec_Trust = GRAPH(Trust_In_Team_Members,0,10,
[23.8,23.8,23.7,23.5,23.5,22.6,21.3,18.5,2.2,1.2,0.9"Min:0;Max:25"])

aux TmTp_Dissp_Vision = GRAPH(Clarity_Of_Vision,0,10,
[23.9,23.8,23.7,22.6,21.5,18.5,14,8.5,5.1,3.2,1.9"Min:0;Max:25"])

aux Total_Resources = External_Resources+Internal_Resources

aux TrustFilterOn_Tot_Res = GRAPH(Trust_In_Team_Ldr,0,10,
[0,0.11,0.42,0.69,0.8,0.9,0.99,1,1,1"Min:0;Max:1"])

doc TrustFilterOn_Tot_Res = Generates the validity of the resources filtered by the trust the members have on resources coming down the line. No trust, filters out what comes down the pipeline.

const AminTarget_Resources = 85

doc AminTarget_Resources = This figure may or not may be based on knowledge of the amount of resources needed to make the team work by upper management.

const Base_Burnout_Rt = 4

const Base_EmpRt = .09

const Base_Inc_In_Account = .06

const Base_Inform_rate = 1.25

const BaseInc_In_ExtRes = .415

const BaseInc_InMembSkls = .15

const BaseIncTrustInTeam = .08

const Baseline_HrsPerMnth = 160

const BsTime_ToDec_Burn = 16

const CompFrac_for_Committ = .97

const CompFrac_IncT_Sprt = .06

const CompFrac_Level = .15

const CompFrac_TrustLdr = .4

const CompFracZl = .07

const CoumpFrCommun = .08

const Desired_Team_Size = 10

const Fr_Diver = .23

const FracCompLTFunct = .2

const FractCompCVis = .06

const FrIncIn_learn = .3

const Initial_Team_Expected_Res = 85
doc Initial_Team_Expected_Res = This figure corresponds to the amount of resources told to the supervisor by upper management.

const Old_Standard = 40
doc Old_Standard = This is the old standard of performance that is not competitive in the general, perhaps global market.

const Time_for_Loss_of_Perf = 100

const Time_For_Loss_ofAmb = 100

const Time_For_Perf = 6

const Time_To_Fill_General_Positions = 6

const Time_To_Loose_Kn = 35

const TimeToCareForTeam_Membrs = 6

const TimeToGet_Resources = 6

const Tm_To_Dissp_ExRes = 6

const Tm_To_Lose_Inf = 4

doc Tm_To_Lose_Inf = The time constant probably should be fairly short if the team is somewhat cut off from getting information concerning the customer base.

const Tolorance_4_Ambig = 0

const Total_Roles = 100

Run # 2. Changes Due to Inadequate resource run

init Internal_Resources = 25

Run #3. Changes Due to Ineffective Team Leadership

aux Memory_Of_Control =

GRAPH(TimeSeries_1,0,10,[80,78,73,72,72,71,71,71,71,71,71"Min:0;Max:100"])

const Man_Bound = 3

doc Man_Bound = First one should note that in this team dynamics model, the variable is exogenous. It is an internal variable in the leadership model, i.e., in the leadership model its values over time are determined internally. Man_Bound (Managing the boundaries) is a variable that represents the team leader's ability to work well with other parts of the organization, help the team get information from clients and customers, as well as information about relevant competitor behavior.