

# Reusability in Goal Modeling: A Systematic Literature Review - Second Phase Categorizations

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## Abstract

This attachment provides the second phase categorizations for the systematic literature review in two parts.

A complete list of the 168 and 202 publications that fit all of the inclusion criteria out of the total of 2,464 and 1,120 results in the result sets of the searches for goal model reuse and contextual goal models, respectively, are demonstrated in 2 tables.

27 publications that appear in the result sets of both searches are shown in both tables as their classifications may differ for each search, resulting in a complete reference set of 343.

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## Part I

# Categorizations for Goal Model Reuse

Table 1 demonstrates the second phase categorizations for the 168 publications from the first phase related to goal model reuse:

- 58 contain a goal model reuse approach,
- 72 use goal modeling in a wider context, as part of a proposed approach, and do not focus or elaborate on goal models and their reuse,
- 15 introduce a new goal modeling language or an extension to an existing one but reusability is not investigated and a reuse approach is not specified,
- 5 propose an adaptation of an existing goal modeling notation to a specific domain, while not focusing on reuse,
- 18 provide a comparison of approaches or an assessment of existing goal modeling languages.

Table 1: Second Phase Categorizations for Goal Model Reuse

Category Description	Publications in the Category
Contains a goal model reuse approach	[1][2][3][4][5][6][7][8][9][10][11][12][13][14] [15][16][17][18][19][20][21][22][23][24][25] [26][27][28][29][30][31][32][33][34][35][36] [37][38][39][40][41][42][43][44][45][46][47] [48][49][50][51][52][53][54][55][56][57][58]
Use goal modeling in a wider context, as part of a proposed approach, and do not focus or elaborate on goal models and their reuse	[59][60][61][62][63][64][65][66][67][68][69] [70][71][72][73][74][75][76][77][78][79][80] [81][82][83][84][85][86][87][88][89][90][91] [92][93][94][95][96][97][98][99][100][101] [102][103][104][105][106][107][108][109] [110][111][112][113][114][115][116][117] [118][119][120][121][122][123][124][125] [126][127][128][129][130]
Introduce a new goal modeling language or an extension to an existing one but reusability is not investigated and a reuse approach is not specified	[131][132][133][134][135][136][137][138] [139][140][141][142][143][144][145]
Propose an adaptation of an existing goal modeling notation to a specific domain, while not focusing on reuse	[146][147][148][149][150]
Provide comparison of approaches or assessment of existing goal modeling languages	[151][152][153][154][155][156][157][158] [159][160][161][162][163][164][165][166] [167][168]

## Part II

# Categorizations for Contextual Goal Models

Table 2 demonstrates the second phase categorizations for the 202 publications from the first phase related to contextual goal models:

- 98 introduce an approach for modeling contextual information in goal models,
- 39 use one of the contextual goal modeling approaches in the first category as is,
- 45 use goal models in a wider context, as part of a proposed approach, and do not focus or elaborate on how context is/should be represented in goal models,
- 20 provide a comparison of approaches or an assessment of existing contextual goal modeling approaches.

Table 2: Second Phase Categorizations for Contextual Goal Models

Category Description	Publications in the Category
Introduce an approach for modeling contextual information in goal models	[20][33][38][42][47][48][49][50][51][54] [81][131][169][170][171][172][173][174] [175][176][177][178][179][180][181][182] [183][184][185][186][187][188][189][190] [191][192][193][194][195][196][197][198] [199][200][201][202][203][204][205][206] [207][208][209][210][211][212][213][214] [215][216][217][218][219][220][221][222] [223][224][225][226][227][228][229][230] [231][232][233][234][235][236][237][238] [239][240][241][242][243][244][245][246] [247][248][249][250][251][252][253][254]
Use one of the contextual goal modeling approaches in the first category as is	[4][73][74][255][256][257][258][259][260] [261][262][263][264][265][266][267][268] [269][270][271][272][273][274][275][276] [277][278][279][280][281][282][283][284] [285][286][287][288][289][290]
Use goal models in a wider context, as part of a proposed approach, and do not focus or elaborate on how context is/should be represented in goal models	[86][90][91][95][105][110][116][121][291] [292][293][294][295][296][297][298][299] [300][301][302][303][304][305][306][307] [308][309][310][311][312][313][314][315] [316][317][318][319][320][321][322][323] [324][325][326][327]
Provide comparison of approaches or assessment of existing contextual goal modeling approaches	[158][159][161][168][328][329][330][331] [332][333][334][335][336][337][338][339] [340][341][342][343]

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